KINGDOM *of* SERBS, CROATS *and* SLOVENES

(YUGOSLAVIA)

A COMMERCIAL *and* INDUSTRIAL HANDBOOK

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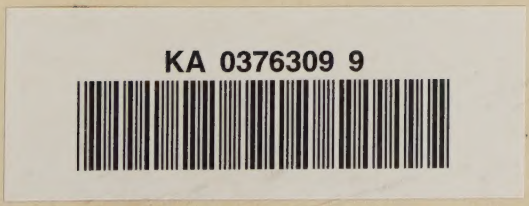

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DEPARTMENT OF COMMERCE
BUREAU OF FOREIGN AND DOMESTIC COMMERCE
JULIUS KLEIN, DIRECTOR

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KINGDOM OF SERBS, CROATS AND SLOVENES
(YUGOSLAVIA)

A COMMERCIAL AND INDUSTRIAL HANDBOOK

By

KENNETH S. PATTON
AMERICAN CONSUL AT BELGRADE

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LETTER OF SUBMITTAL

DEPARTMENT OF COMMERCE,
BUREAU OF FOREIGN AND DOMESTIC COMMERCE,
Washington, March 1, 1928.

SIR: There is submitted herewith a commercial and industrial handbook of the Kingdom of the Serbs, Croats, and Slovenes (commonly referred to as "Yugoslavia"). This study is comparable in scope and purpose to other handbooks published in the past by the Bureau of Foreign and Domestic Commerce, such as those on Peru, Colombia, Venezuela, China, Turkey, and numerous other countries, which the American business community has found useful in the furtherance of commercial activities.

This survey is the work of Consul Kenneth S. Patton, who for many years has been stationed at Belgrade, the capital of the Kingdom, and who has devoted much time and effort to the acquisition of the essential data and their preparation in a form calculated to be helpful to American exporters, investors, and other persons interested in the economic development of southern and eastern Europe. Samuel Goldberg, of the Regional Division of this bureau, has added certain data that have become available only recently.

The Kingdom of the Serbs, Croats, and Slovenes is a European nation concerning which the average American exporter needs more information than has previously been obtainable. It is a country that presents an opportunity for a growth in the sales of American merchandise, our present share of the trade being exceedingly small. In 1926 the United States sold only $5,439,930 worth of goods to this Kingdom—ranking ninth in the import trade, with only a little more than 4 per cent of the total value.

It is earnestly hoped that this handbook will contribute to a steady improvement in the American position with respect to this Kingdom's commerce.

Respectfully,

JULIUS KLEIN,
Director of Bureau.

To Hon. HERBERT HOOVER,
Secretary of Commerce.

EQUIVALENTS OF CERTAIN METRIC UNITS APPEARING IN THIS BOOK

1 meter =3.28 feet.
1 kilometer =0.62 mile.
1 hectare =2.47 acres.
1 liter =1.057 liquid quarts; 0.9 dry quart.
1 hectoliter =2.84 bushels.
1 kilo =2.2046 pounds.
1 metric ton=2,205 pounds.

KINGDOM OF SERBS, CROATS, AND SLOVENES: A COMMERCIAL AND INDUSTRIAL HANDBOOK

HISTORICAL INTRODUCTION

The formation of the Kingdom of the Serbs, Croats, and Slovenes brought the various branches of the South Slav (Yugoslav) race under one government. These Slavs formerly had their homes in Poland, Galicia, and the Carpathians, but in the sixth and seventh centuries they migrated south and occupied the Balkan peninsula.

The South Slav migration comprised three racially identical tribes—the Serbs, Croats, and Slovenes. The Slovenes occupied southern Carinthia, which now forms the extreme northwestern part of the present Kingdom of the Serbs, Croats, and Slovenes. The Croats settled in the region lying between the Save and Drave Rivers, as well as in parts of Bosnia and Dalmatia, while the Serbs, the largest element, overran Serbia, Montenegro, the Voivodina, and parts of Bosnia, Dalmatia, and Macedonia. These early Slav settlers were in the tribal stage of development, and little or no cohesion existed among them. Their government was local and centered around agricultural village communities (called "Zupy"). They lacked discipline but were freedom-loving and strongly attached to the soil which they cultivated as small proprietors. Their failure to form a strong central government resulted in their soon falling under foreign domination.

SLOVENIA

Almost immediately after their migration, the Slovenes formed part of the Czecho-Slovene Kingdom under Samo (627–658), but this coalition came to an end at Samo's death and, in order to resist the domination of the Bavarians and Friulians, they voluntarily submitted to the hegemony of the Franks in 748. At the division of the Empire of Charlemagne their land was divided between the Dukes of Bavaria and Friuli and they became subject to German culture and colonization. By the fourteenth century these Slavs came under the control of the Hapsburg dynasty, where they remained until the fall of the Austro-Hungarian Empire, in 1918, as a result of the World War. They then formally and voluntarily united with the other South Slavs in the formation of the Kingdom of the Serbs, Croats, and Slovenes.

CROATIA-SLAVONIA

The Croats, soon after establishing themselves along the Save and Drave Rivers in the territory now known as Croatia-Slavonia, fell under the influence first of the Eastern and then of the Western Empire, but in 914 they secured their virtual independence under their chief, Tomislav, who assumed in 925 the title of King. By

1102 Hungary had consolidated its power in Croatia, allowing to the Croats, however, a modicum of autonomy, which included the retention of their Diet.

When, in 1526, the Hungarians had been defeated at Mohacs by the Turks, Slavonia (which at this time was a separate monarchy) and a part of Croatia became subject to the Ottoman Empire, while Austria obtained the remainder of Croatia. In 1687 the Austrian imperial forces defeated the Turks at the second battle of Mohacs and took entire possession of both Croatia and Slavonia. As, earlier in the same year, the Hungarian crown had become hereditary in the House of Hapsburg, Croatia and Slavonia once more came under Hungarian control, which continued effective until the end of the World War, except for the period from 1809 to 1814, when they formed part of the Illyrian Provinces erected by Napoleon. In 1881, Slavonia was linked with Croatia to make one administrative unit, known as Croatia-Slavonia, and this union has continued to the present day.

DALMATIA

The Slav migration into Dalmatia took place in the seventh and eighth centuries and drove the Italian population into the coast towns and ports. From the tenth century until 1718, the Italians maintained their supremacy over the ports and islands, while the hinterland was conquered and reconquered by the successive dominant powers in the Balkans. In this way it was held for brief periods by the Croats, Hungarians, Serbs, Bosnians, and Turks. In 1718, however, Venice extended its supremacy over all Dalmatia,[1] and this supremacy lasted until the Venetian Republic was overthrown by Napoleon in 1797, when Dalmatia was given to Austria.

In 1805, however, the rupture between France and Austria resulted in Napoleon's transferring this Province to the new Kingdom of Italy. This arrangement lasted only until 1809, when Dalmatia formed a part of the new Illyrian Provinces which included Croatia, Carniola, Istria, and Ragusa. These Provinces were overthrown by the defeat of Napoleon in 1814, when Dalmatia became part of Austria and so remained until its voluntary incorporation in the new Kingdom of the Serbs, Croats, and Slovenes.

BOSNIA-HERZEGOVINA

Bosnia was first dependent on Croatia, but in the eighteenth century it was occupied by the Hungarians. From that date it became a bone of contention for all of its neighbors and successively passed under the control of the Serbs, Croats, and Hungarians for short periods of time. Herzegovina was joined to Bosnia in 1325 as a result of conquest by the Bosnian ruler. Bosnia and Herzegovina became parts of the great Serbian Empire of Stephen Dushan (1331–1353), but at his death they once more came under Hungarian control. The rise of the Turkish power in Europe submerged the Serbs at the battle of Kosovo (1389), and the continuing Turkish successes overwhelmed Bosnia in 1463, and Herzegovina in 1483. Nor was it until the treaty of Berlin (1878) that Bosnia-Herzegovina, already united into a single Province, was liberated from the domination of the

[1] With the exception of Ragusa (Dubrovnik), which was an independent Republic.

Ottoman Empire and, although nominally a part of the Turkish dominions, placed under the administrative control of Austria-Hungary. In 1908 Austria-Hungary formally annexed Bosnia-Herzegovina, which remained a part of the Dual Monarchy until, liberated by the defeat of the Central Empires in the World War, it joined the present State in 1918.

MONTENEGRO

Montenegro was settled by the Serbs at the time of their migration into the Balkans. Protected by its mountain fastnesses, it was never conquered by the Turks and, except during the thirteenth and fourteenth centuries when it formed part of the Serbian Empire, it enjoyed an independent existence (save for a brief period following its surrender to Austria-Hungary in 1916) until it voluntarily became an integral part of the Serbo-Croat Kingdom in 1918.

VOIVODINA

During the sixth and seventh centuries a part of the migrating Serbs settled in Hungary, but they were soon driven to southern Hungary (the region now known as Voivodina) by the Magyar invasion.

During the eleventh and twelfth centuries the Slav element was a predominent influence in the country immediately north of the Danube. During the two succeeding centuries the southward trend of the Magyars and the colonization of the region by Knights of St. John resulted in a steady decline of the Serbian influence. The defeat of the Serbian Empire at the battle of Kosovo in 1389, followed by the complete submersion of Serbia by the Turks, brought about a colonization of southern Hungary by Serbian refugees from the regions occupied by the Turks.

These refugees were granted a large measure of autonomy by the Magyar rulers, and their leader, Stephen Lazarevich, was appointed "despot," a function equal in power and privilege to that of a viceroy. This office of "despot" was successively conferred upon the dominant Serbian chieftain until the incorporation of Hungary in the Ottoman Empire in 1547. The Turks maintained their hold upon this region until the treaty of Karlowitz in 1699, when, as a result of the defeat of the Turks, Hungary was given to the Austrian Empire. From that date until the end of the World War the Serbian element in southern Hungary was under the control and influence of the Austrian Empire and of its successor, the Dual Monarchy.

MACEDONIA

Macedonia first came into historical prominence under the leadership of Philip of Macedon and Alexander the Great (fourth Century B. C.), during whose reigns it became Hellenized. The first Slav settlers made their appearance toward the end of the sixth century. The Greek control over Macedonia was broken only in the middle of the ninth century by the First Bulgarian Empire. The Bulgarian domination was of short duration, and by 1014 A. D. the Greeks had regained the ascendancy. There followed a long interval of rapidly

shifting control, Macedonia passing successively for brief periods under the hegemony of the Byzantine Empire, the Second Bulgarian Empire, the Latin Kingdom of Saloniki, the Greek Empire of Nicaea, and, again, of the Byzantine Empire. The rise of the Serbian Empire toward the end of the thirteenth century submerged Macedonia, but this control was brief, as the Turks defeated the Serbs in 1371 and Macedonia became a Turkish province. The Balkan wars of 1912 and 1913 broke the power of the Ottoman Empire and resulted in the partition of Macedonia between Serbia, Greece, and Bulgaria—Serbia receiving the largest portion.

SERBIA

The Serbs were by far the most numerous of the three Slav tribes which settled in the Balkans. During the first centuries following their migration they came within the orbit of the Greek Emperors in Constantinople except for a brief period when they were under the domination of the Bulgarian Empire. During the twelfth century, under the leadership of Stephen Nemanja, a strong Serbian Monarchy was formed and for two centuries dominated the entire peninsula and reached its zenith under Stephen Dushan (1331–1355). The dominions of Dushan extended from the Danube to the Aegean Sea and from the Adriatic[2] to Thrace. They included Albania and all of Macedonia, with the exception of Saloniki. This was a purely Serbian Empire, as neither Croatia nor Slovenia formed part of it. Upon Dushan's death, the Serbian Empire began to decline, until it was overthrown at the battle of Kosovo in 1389 by the Turks, who by 1483 consolidated their victory and submerged practically the whole Serbian race with the exception of the inhabitants of Montenegro. Except for a brief period during the early eighteenth century, when the Austrians occupied northern Serbia, this subjugation continued in an unbroken line until 1804, when Kara-George, a Serbian peasant, raised the standard of revolt and succeeded in freeing Serbia by 1807. The treaty of Bucharest at the close of the Russian-Turkish War abandoned the Serbs to the Turkish Government. In 1815 a new uprising took place, led by Milosh Obrenovich, whose followers assassinated Kara-George; by 1817 the former was chosen hereditary prince of Serbia with the consent of the Turks. In 1830 he was formally invested an hereditary prince by the Sultan. Upon his abdication in 1839 he was succeeded by Milan Obrenovich II, who died within a month of his accession.

Michael Obrenovich III then came to the throne. He was overthrown in 1842, and Alexander Kara-Georgevich, the son of Kara-George, was elected prince by the national assembly. His reign continued until 1859, when he was expelled and Milosh Obrenovich I (who abdicated in 1839) returned to power. Milosh Obrenovich died the following year, and Michael Obrenovich III, returning from exile, again assumed charge of the government. Upon his assassination in 1868, Milosh Obrenovich IV ascended the throne. The liberal constitution granted in 1869 and the Serbian-Turkish War in 1877–78 were the two most important events of his reign. As a result of the war the Serbs obtained the formal recognition of the Great Powers by the treaty of Berlin. In 1882 Prince Milan pro-

[2] Ragusa did not form a part of the Empire.

claimed himself King. He undertook a war against Bulgaria for the purposes of obtaining territorial compensation for the enlargement of Bulgaria through its union with Eastern Roumelia. The War was a Serbian disaster, Austria intervened, and the second treaty of Bucharest in 1886 resulted in no territorial modification. A more liberal constitution was drawn up and adopted in 1889, and after that King Milan abdicated in favor of his son Alexander. In 1903 the Obrenovich dynasty came to an end with the assassination of King Alexander and Queen Draga, whereupon Prince Peter Kara-Georgevich, the son of the Prince Alexander who had been exiled in 1859, was unanimously elected to be King of Serbia.

In 1912 the Balkan League, comprising Montenegro, Greece, Bulgaria, and Serbia, was formed for the purpose of driving the Turks out of Macedonia and Thrace. The Balkan countries were successful in this, but in 1913 dissensions broke out between the Bulgarians on one side and the Greeks and Serbs on the other as to the division of the territory conquered from the Turks, and war resulted. The Greeks and Serbs, aided by the intervention of the Rumanians, defeated the Bulgarians and a treaty was signed at Bucharest allotting to Serbia central Macedonia, including Ohrid, Kosovo, and the eastern half of the Sandjak of Novi Pazar. These acquisitions increased the area of Serbia from 18,650 to 33,891 square miles and its population from 3,000,000 to 4,250,000.

WORLD WAR AND FORMATION OF NEW KINGDOM

On June 28, 1914, the Archduke Ferdinand, heir apparent to the Imperial Crown of Austria, was assassinated at Sarajevo. This event was followed by the World War which resulted in the defeat of the Central Empires and the consolidation of all the Yugoslavs (except the Bulgarians) in the Kingdom of the Serbs, Croats, and Slovenes.

The political basis of the new Kingdom is to be found in the pact of Corfu which was signed in July, 1917, by the representatives of Serbia and of the Yugoslav Committee of London. This pact provided that all the Serbs, Croats, and Slovenes living "in compact masses and without discontinuity" should unite to form a single constitutional monarchy headed by the Kara-Georgevich dynasty. The equality of the Orthodox, Roman Catholic, and Moslem religions and the use of both the Cyrillic and the Latin alphabet were guaranteed.

On November 19, 1918, the Croatian national assembly, speaking on behalf of all the Yugoslavs of the former Dual Monarchy, issued a manifesto calling for union with Serbia. Earlier in the year (on November 13, 1918) the Montenegrin National Assembly, having deposed King Nicholas, their former sovereign, proclaimed their union with Serbia. On December 1, 1918, the Prince Regent, Alexander, announced the formation of the new Kingdom of the Serbs, Croats, and Slovenes, and proclaimed that the new State was to be a constitutional and parliamentary monarchy.

As a result of ministerial crises the elections for the constituent assembly were not held until November 28, 1920. The constituent assembly met on January 1, 1921, and on June 28 of the same year the constitution was voted and published.

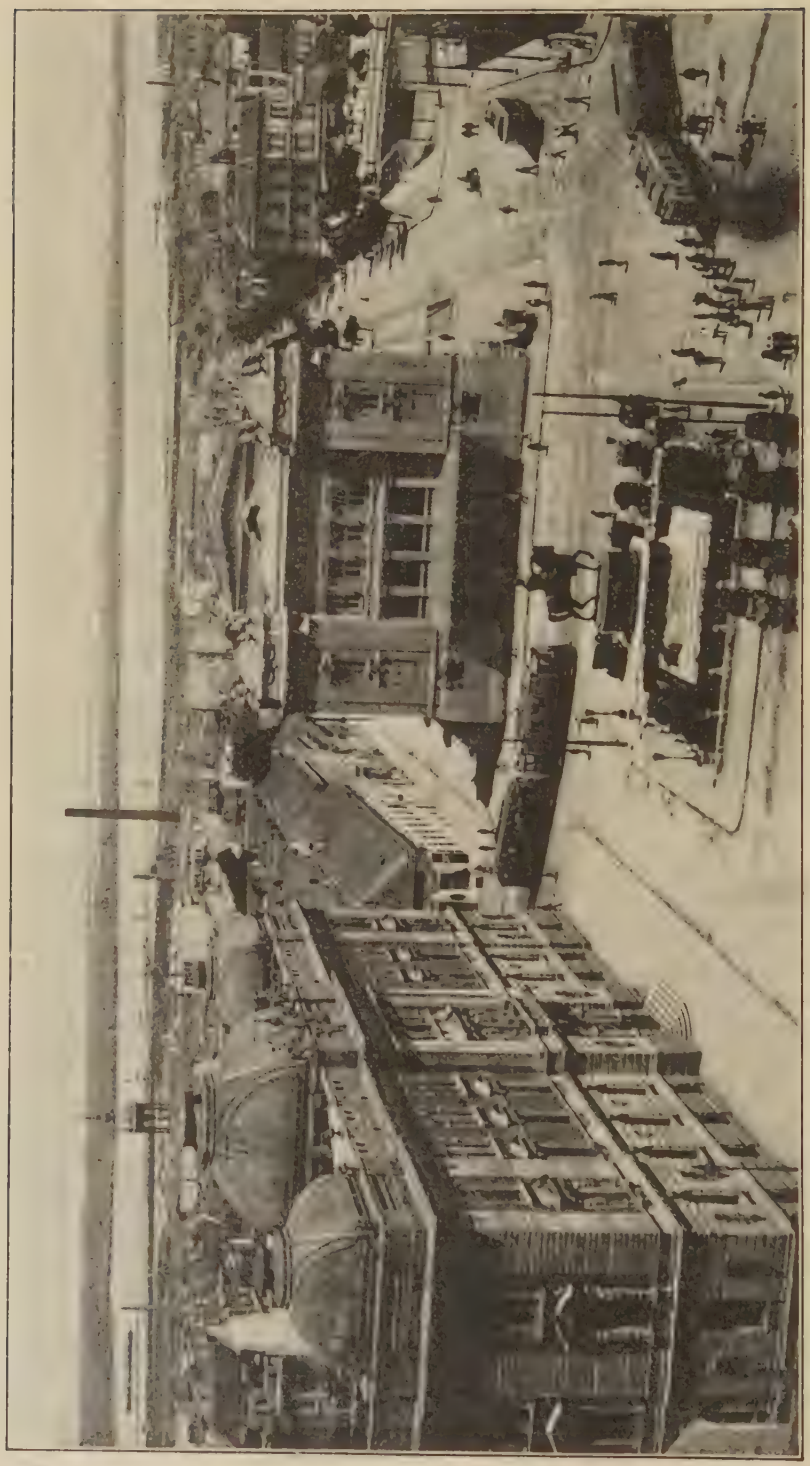


FIG. 1.—Monument Square, Belgrade, Showing National Theater in front and State Mortgage Bank at left

DYNASTY

The present King is Alexander I, son of King Peter I, of the Kara-Georgevich dynasty. On June 8, 1922, he married Princess Mary, the second daughter of the King and Queen of Rumania. The heir apparent is Prince Peter, who was born on September 6, 1923. King Alexander acceded to the throne upon the death of his father, on August 16, 1921.

SUMMARY OF CULTURAL AND RELIGIOUS DEVELOPMENT

The peoples of the Kingdom have been subjected to two distinct currents of cultural and religious influences. The former subjects of the Dual Monarchy, with the exception of the Bosnians and Herzegovinians, were brought up under western culture and the religious ascendancy of the Vatican. The Serbians and Montenegrins, on the other hand, were early converted to the Orthodox faith by the two great religious teachers Cyril and Method, the fathers of the Cyrillic alphabet. The religious and cultural life of these two peoples has therefore been Byzantine. The Bosnians and Herzegovinians have been subjected to three distinct influences—(*a*) the Orthodox Church, following their conversion to Christianity; (*b*) the Moslem religion during the Turkish domination; and (*c*) the domination of the Austrians, who not only molded them culturally by their schools, but left a decided influence upon their religious life.

The Serbians of the Voivodina were originally Orthodox, but under the Hungarian influence the Roman Catholic Church obtained the ascendancy so that to-day the adherents of Rome are in the majority. The following table shows the allegiance of the population of the various Provinces of the Kingdom to the three principal faiths:

Provinces	Orthodox	Roman Catholic	Moslem
Serbia	3,356,761	36,365	721,087
Montenegro	168,398	8,507	22,856
Croatia-Slavonia	660,234	1,991,168	2,495
Dalmatia	105,560	514,607	652
Slovenia	6,627	1,020,287	650
Bosnia-Herzegovina	829,162	443,914	588,247
Voivodina	475,485	720,306	1,700
Total	5,602,227	4,735,154	1,337,687

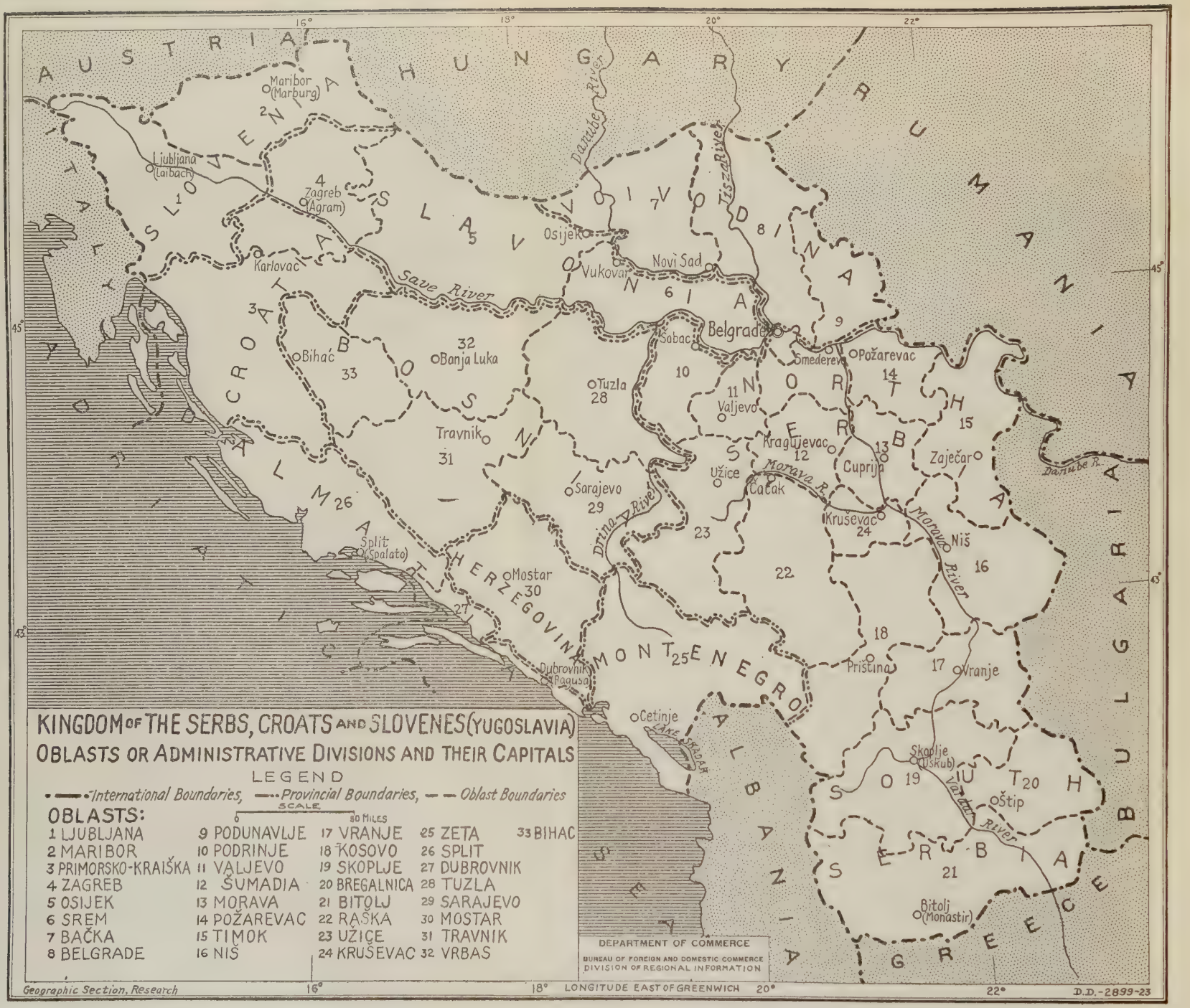
The Protestants in the Kingdom number 216,847, most of whom reside in the Voivodina. The Jewish element totals 64,159, a considerable proportion of whom are descendants of Spanish Jews.

The difference in the cultural life of the peoples forming this Kingdom is reflected in the use of the Cyrillic alphabet by the Serbs, Bosnians, and Montenegrins and of the Latin alphabet by the remainder of the population.

GENERAL ECONOMIC POSITION

This Kingdom, through which pass all the land and river routes from western Europe to the Near East, is the natural gateway for commerce between these two sections. The abundance of labor

and water power, combined with the great agricultural, forestal, and mineral resources, makes it a potential industrial center of the future from which merchandise can be supplied for the markets of the Near East. The Adriatic Sea coast with its numerous (but as yet undeveloped) harbors constitutes a valuable economic and commercial asset capable of considerable development. The realization of these economic and commercial potentialities will depend largely upon a well-considered program of railroad construction and harbor development, as well as upon tariff agreements with the other "Succession States" of the Austro-Hungarian Empire.



77765°—28. (Face p. 9.)

FIG. 2

PHYSICAL CHARACTERISTICS OF TERRITORY[2a]

LOCATION, BOUNDARIES, AND AREA

The Kingdom of the Serbs, Croats, and Slovenes is situated in the southeast of Europe and lies between the latitudes 46° 51′ 40″ and 40° 41′ 20″ north and between longitudes 13° 40′ 49″ and 23° 7′ 14″ east (Greenwich).

It is bounded on the north by Austria and Hungary, on the east by Rumania and Bulgaria, on the south by Greece and Albania, and on the west by Italy, the Adriatic Sea, and Albania.

The total area of the country, according to the best official figures, is 96,737 square miles. The relative size of the Kingdom may be readily seen when it is known that it is slightly smaller than the State of Wyoming and slightly larger than the combined areas of Pennsylvania and New York, or of Illinois and Indiana, or of the present areas of both Austria and Hungary.

MOUNTAIN SYSTEMS

The Kingdom is essentially mountainous, by far the greater proportion of its area having an elevation of over 1,000 feet.

WESTERN OR ALPINE SYSTEM

On its western frontier the Alpine system covers all of Slovenia, with the Julian Alps, the Karavanka Alps, and the Steiner Alps. The highest point in the Julian Alps is Mount Triglav (9,394 feet), in the extreme northwestern part of Slovenia. The dominant peak of the Karavanka Alps, which are a continuation of the Carnic Alps, is Mount Stol, with an elevation of 7,344 feet; while the highest point in the Steiner Alps is Mount Grintouz (Grintovac), which rises 8,392 feet.

One branch of this Alpine system continues eastward into Croatia-Slavonia and runs in the form of a narrow chain between the Save and Drave Valleys to the neighborhood of Brod. This chain is linked up with the short, low mountain range south of Novi Sad, known as the "Fruška Gora," by a line of hills of slight elevation. A more important Alpine system, made up of the Velebit Mountains and the Dinaric Alps, continues in a southeasterly direction, paralleling the Adriatic Sea, as far as the Albanian frontier. The Velebit Mountains are a prolongation of the Julian Alps and form the western shore line of Croatia. The highest peak is Mount Vakanski (5,767 feet), to the northeast of Zara. Parallel to this range there rises to the east a higher chain known as the Dinaric Alps, which runs southeast and links up with the Albanian system. The highest points of the Dinaric

[2a] It seems desirable at this point to say something concerning the spellings that have been adopted for the geographic names in this book, as well as for certain other Serbo-Croatian and Slovenian words. These have been made to conform as nearly as possible to the spellings actually in use in the Kingdom. This has involved the use of certain diacritical marks. It should be noted that "š" is pronounced like our "sh"; "č" like our "ch" in "chair"; and "ž" like our "z" in "azure." The letter "ć" (usually the final or next-to-final letter) also has the sound of "ch." In Serbo-Croatian, the *unmodified* "c" has the sound of "ts" or "tz." For example, Šabac is pronounced "Shabatz." The Serbo-Croatian "j" has the sound of the English "y" as in "year."

Alps are Mount Dinare (6,007 feet) and Mt. Troglav (6,276 feet), both of which are northeast of Split (Spalato); Mount Voljnac (7,800 feet), near the Montenegrin frontier; and Mount Lovchen (5,771 feet), which rises from the Bay of Kotor (Cattaro). This chain is broken by only four important gaps—one at Fiume; one formed by the Zrmania and Krka Rivers, near Knin; one by the Neretva River, at Metković; and one by the Drim and Bojana Rivers, near Scutari, Albania. To the east of this range are several minor parallel ranges running from the northwest to the southeast and gradually decreasing in elevation with the distance from the coast. until they fade out into the Pannonian Plain formed by the Danube and its confluents. This mountain system covers all of Slovenia and Dalmatia, the greater part of Bosnia-Herzegovina, all of Montenegro, and a considerable portion of Croatia-Slavonia.

The characteristic features of the more elevated regions are the Karstlands and the abruptness with which the mountains rise from the sea. The "Karstlands" is a term applied to a barren, stony limestone district, devoid of surface waters and with little or no surface soil. This Karst region covers practically all of Dalmatia and Herzegovina, and much of the western portions of Bosnia, Montenegro, Croatia, and Slovenia. The absence of surface soil results in the majority of the inhabitants being clustered together in elongated, flat-bottomed valleys bounded by vertical limestone sides. These valleys, which constitute the only fertile areas in the Karst regions, are known as "poljes," the soil of which is usually an arenaceous sediment. On leaving the crests of the dominant coast ranges, which are barren Karstlands, the secondary mountain chains are found to be heavily covered with fir trees, after which the lower ranges of this system in northeastern Bosnia are reached. These are featured by round-topped knolls, which are heavily wooded with beech and other foliage trees, in contrast to the barren heights of the Karst regions and to the fir-clad mountains of the intermediate ranges. The drainage of practically this entire system flows northeastward into the Danube and its tributaries. Only a few minor streams flow into the Adriatic, the only important one being the Narenta, whose course is 136 miles long.

EASTERN SYSTEM

On the eastern frontier, the Carpathians cross into the Kingdom at the Iron Gates and continue southward to Zaječar, Serbia. The highest point in this range is near Lisac and has an elevation of 4,816 feet. The Balkan Range starts at Zaječar and runs south along the Serbo-Bulgarian frontier until it crosses into Bulgaria, near Caribrod. The loftiest peak is Mount Midzor (7,172 feet). Both the Carpathians and the Balkan Range are forest-clad.

The rest of Serbia comprises an irregular and disconnected series of mountains known as the Rhodope system, which are of very old formation and are distinguished by their rounded tops. This system is triangular in shape, with its base resting on the Aegean Sea and its apex near Belgrade. The great central divide of the Balkan Peninsula is formed by a ridge of these mountains made up of the Shar, the Kara Dag, and the Patarica Ranges, which traverse Serbia in a northeasterly direction from between Tetovo and Prizren in the west to the Bulgarian frontier near Vranje. The mountains to the north of this divide are usually well wooded, while those to the south were denuded during the Turkish régime which placed high taxes on trees.

The highest peaks in the Rhodope system are Mount Osogov (7,300 feet), on the Bulgarian frontier to the east of Skoplje, and Suva Rudiste (7,021 feet), about midway between Niš (Nish) and Novi Pazar.

The line of communication between Belgrade and Saloniki formed by the Morava and Vardar Rivers flanks the western slopes of the Rhodope Mountains.

SHAR SYSTEM

Near the southeastern frontier of Montenegro begins a series of mountain chains known as the Shar system, which runs along the Albanian frontier to the Greek frontier and serves as a connecting link between the Dinaric system and the Pindus Range of Greece. The highest peaks are Mount Ljuboten (8,235 feet), northeast of Skoplje, and Mount Perister (8,586 feet), east of Bitolj (Monastir).

GEOLOGICAL FORMATION

The rugged highlands which constitute the greater portion of the Kingdom are of comparatively recent geological formation. Most of it belongs to the post-Carboniferous period included in the Mesozoic and lower Cenozoic ages.

The older formations are, however, not altogether lacking. The oldest geological period, the Archaean age, is represented by gneisses, granites, schists, and rhyolites, which occur either as eruptives or intrusions in eruptives. These are found principally in the area extending from the Danube southeastward toward the Bulgarian frontier.

The Older Paleozoic age (Devonian era) is represented by a series of clay-slates, quartzites, and limestones which attain their greatest development in southwestern Serbia. The Newer Paleozoic age (Carboniferous era) is found in Slovenia, where it forms the central axis of the Karavanka Mountains. In this case, the rocks consist of sandstone, shales, and limestones. Another belt of this area is known to occur in Bosnia, extending past Prijedor and Fojnica into Montenegro. It includes important beds of iron ore.

In the South Slav lands, the Mesozoic formations, as previously indicated, have the widest development. In the Triassic era of this age are massive limestones and dolomites. In the Slovenian highlands these have been subjected to powerful earth movement and hence are frequently folded, faulted, and cleaved. With them are associated extensive masses of igneous rocks. This era is also represented in western Croatia, Bosnia-Herzegovina, and Dalmatia. The Danube and Timok valleys contain some important beds of coal, belonging to the Jurassic era. In central Serbia coal occurs in the Cretaceous era.

The Cenozoic age is especially well marked in Croatia-Slavonia and Slovenia. The deposits of brown coal at Trbovlje (Slovenia) are of this age. In Dalmatia and Herzegovina this formation usually consists of limestones in which sandstone is frequently intercalated, as around Split (Spalato). All the important beds of brown coal in Bosnia and the important coal deposit at Senje in central Serbia belong to this age.

In the newer Cenozoic or recent geological formations are found the glacial gravels of the upper Drave and Save Valleys in Slovenia and the glacial sands and gravels in the valley basins around Ljubljana and the base of the Karavanka Mountains.

WATERSHEDS

The watershed of the western mountain system is formed by the crests of the ranges which skirt the coast from the Italian frontier to the vicinity of Split (Spalato), then veer to the southeast across the Ivan Range, midway between Sarajevo and Mostar, and continue their southeasterly course to the neighborhood of Prizren. The water of the eastern and northeastern slopes drains into the confluents of the Danube, and of the western and southwestern slopes into the Adriatic. The watershed of the eastern system is formed by a ridge, made up of the Shar, Kara Dag, and Patarica Ranges, and traverses Serbia in a northeasterly direction from between Tetovo and Prizren to the Bulgarian frontier near Vranje. The northern slopes drain into the Danubian system and the southern slopes into the Aegean Sea. Thus it will be seen that the rivers draining into the Danube form a drainage area covering approximately four-fifths of the territory of the Kingdom, while the Adriatic drainage area is practically negligible and that of the Aegean comparatively unimportant.

RIVER SYSTEMS

The rivers of the Kingdom of the Serbs, Croats, and Slovenes form a network covering the entire country, and their basins constitute the principal routes of railway and road communication. The potential water power of these rivers is an enormous economic resource for the country, and the unusually large number of navigable waterways form a valuable transportation adjunct. The Adriatic, the Vardar, and the Danube are the principal river systems of the Kingdom.

ADRIATIC SYSTEM

The rivers belonging to the Adriatic system are unimportant. They include the Zrmania, which flows into the Adriatic near Zara; the Krka, which enters the sea near Šibenik; the Cetina, which has its mouth near Split (Spalato); and the Neretva, which rises in southern Herzegovina and empties into the sea at Metković.

VARDAR SYSTEM

The Aegean drainage system is formed by the Vardar River and its confluents. This river, which has a course of 164.23 miles, rises in the plains of Tetovo and empties into the Bay of Saloniki. Its chief tributaries on the left bank are the Pčinja and the Bregalnica, and on the right the Črna.

DANUBE SYSTEM

The Danube system comprises all the rivers not belonging to the Adriatic and Aegean drainage systems. The length of the Danube within the territorial limits of this Kingdom totals 295 miles. Its principal tributaries on the right bank are mentioned below:

(1) The Drave River rises in Austria, crosses the frontier of this Kingdom west of Maribor, and enters the Danube near Osijek, after a course within the country of 252 miles. The only tributary of the Drave in the Kingdom is the Mura, which rises in Austria, crosses the Yugoslav frontier northeast of Maribor, and, after a course of 80 miles within the Kingdom, joins the Drave River on the Hungarian frontier to the west of Varaždin.

(2) The Save River (562 miles in length) has its source in Slovenia, in the extreme western portion of the Kingdom, and flows by Ljubljana, Zagreb, and Brod to the Danube at Belgrade, where its breadth is 1,630 feet. The chief tributaries of the Save on the right bank are the Una, which joins the Save at Jasenovac; the Vrbas, which enters near Svinjar; the Bosna, which enters at Chamas; and the Drina. The last is the largest tributary; it rises near the boundary of Montenegro, flows north for 286 miles and empties into the Save River near Rača. The only important tributary on the left bank of the Save is the Bosut, which enters at the town of Bosut.

(3) The Morava River and its confluents drain all of northern Serbia. This river, which has a length of 121.42 miles, is formed by the juncture of the western Morava and the southern Morava just north of Kruševac, in central Serbia. It flows directly north and empties into the Danube about 30 miles east of Belgrade. Its only important tributaries are the western Morava, which rises in western Serbia, near Užice, and the southern Morava, which rises north of Skoplje.

(4) The Timok (114 miles in length) rises near the Bulgarian frontier east of Niš (Nish) flows north, and empties into the Danube near Radujevac, in the northeastern part of Serbia.

The only important tributary in this Kingdom on the left bank of the Danube is the Tisza (Theiss), which rises in Hungary, enters the Kingdom south of Segedin, Hungary, and flows into the Danube midway between Novi Sad and Belgrade. It has a total length within the Kingdom of 129 miles.

PLAINS, LACUSTRINE BASINS, AND "POLJES"

About one-fourth of the area of the Kingdom is covered by the Great Pannonian Plain formed by the basins of the Danube, Save, and Tisza Rivers. This plain has the undulating surface of the American prairies. It is characterized by a black alluvial soil which makes it one of the most productive cereal districts in Europe.

The rugged plateau regions reveal a number of basins which can not properly be classed as plains but which fall naturally into two categories that may be designated as "lacustrine basins" and "poljes." The former result from the drying up or receding of lakes, and to this category belong the basins of Bitolj, Skoplje, and Podgorica, all of which are named after their principal localities. The Bitolj Basin has an area of approximately 500 square miles. Lacustrine deposits form the basis of the soil, but to this has been added a certain amount of gravel washed down from the steep mountain slopes to the "floor" of the region, which is very fertile. The Skoplje Basin is similar in origin and soil to that of Bitolj and has an area of about 150 square miles.

The receding of Lake Scutari has left a large surface of rich alluvial soil, usually known as the "Podgorica Plain," which is the largest productive area in Montenegro. The dearth of agricultural land in this Province has led to the serious study of the question of enlarging the Podgorica Basin by lowering the present level of Lake Scutari through the opening of a drainage channel to the Adriatic. Although no definite decision has been reached, the project is being very favorably considered.

In the first Karst regions there are many elongated, valley-like depressions, known as "poljes," the floors of which have been formed by arenaceous sediment washed down from the scarp, limestone heights which encircle them. These "poljes," which rarely exceed 40 miles in length, constitute the only fertile areas of the Karst regions. The largest of these is the "Livansko Polje," in northwestern Herzegovina, with an area of about 165 square miles.

COAST LINE

The Kingdom has a coast line along the Adriatic Sea of approximately 680 miles, which runs in a southeasterly direction from the Italian frontier, near Fiume, to the Albanian frontier, near Lake Scutari. This coast is characterized by many deep indentations. Along the greater part of it mountain ranges rise almost abruptly from the water's edge. This latter fact has proved a serious handicap to the development of the numerous ports, because of the extreme difficulty of providing adequate rail transportation from the hinterland to the harbors.

ISLANDS

Skirting the coast are a great number of long, narrow islands running in a southeasterly direction, which are simply the summits of a range of mountains paralleling the coast. The total area of these islands is approximately 2,000 square miles or about 1.3 per cent of the total area of the Kingdom. They are all mountainous, but none of the peaks rise above 3,625 feet. Excellent natural harbors exist on all of them.

The following statement shows the areas of the largest of these islands:

	Square miles		Square miles
Krk	165. 25	Brač	152. 50
Rab	39. 77	Hvar	120. 46
Dugi Otok	71. 40	Vis	38. 99
Pag	113. 90	Korčula	106. 56
Pazman	21. 23	Mljet	38. 22
Ugljan	20. 46		

LAKES

Small lakes are widely distributed throughout the entire Kingdom. These are to be found mostly in the mountain regions, where the small deep valleys are not infrequently the sites of picturesque bodies of water. The largest is Lake Skadar, on the frontier between Montenegro and Albania. Lake Skadar is 27 miles long and 8 miles broad, and has an area of about 124 square miles, of which approximately one-fifth lies within Albanian territory. The water is clear and drinkable. The lake is navigable, and small steamers afford an easy means of communication between the towns adjacent to its shores. In winter the water level rises about 10 feet. The second in importance is Lake Ohrid, which is on the Serbo-Albanian frontier and lies about 2,200 feet above sea level. It has a total area of about 106 square miles, of which about one-sixth is in Albanian territory. It is 25 miles long, 9½ miles wide, and has a maximum depth of more than 900 feet. The third largest lake is Lake Presba, which is 14 miles long and 8 miles broad, and has a total area of about 85 square miles. This lake lies on the Serbo-Greek frontier, and about one-third of its area is within Greek territory. Its usual depth is 65 feet,

though soundings have reached a depth of 177 feet. It is about 2,800 feet above sea level and drains into Lake Ohrid by a subterranean channel. Lake Doiran, the smallest of the important lakes of the Kingdom, is on the Serbo-Greek frontier, just north of Saloniki. It is circular in shape, with a diameter of approximately 5 miles. Its total area is about 17 square miles, of which slightly more than one-half lies within Greek territory. Its depth averages about 36 feet. These last three lakes are celebrated for their fish.

CLIMATE AND RAINFALL

Both the "Continental" and "Mediterranean" climates are to be found in the Kingdom. The temperatures vary in the different regions in consequence of the difference in elevation, the distance from the seacoast, and the difference in latitude.

DALMATIA

The Dalmatian coast has a Mediterranean climate, although the temperature of the northern littoral is considerably modified by a cold northern wind known as the "Bora," which subjects that region to frequent variations. In general, however, the Dalmation coast is warm and sunny, the southern littoral having an equable climate closely resembling that of the Riviera. The mean annual temperature along the coast is about 58° F. The high regions back of the coast have a continental climate, are comparable in temperature to Slovenia and western Croatia, and are characterized by extreme cold in winter and heat in summer. The range of temperature at Dubrovnik is from 30.02° to 87.98° F.; at Hvar, 28.76° to 91.4° F.; at Šibenik, 25.88° to 91.4° F.; at Split, 27.86° to 92.84° F. Rainfall is fairly frequent, but the rains are of such short duration that there are few days without sunshine. The annual rainfall along the coast is about 40 inches, about one-half of which falls during the rainy months of October, November, and March. Rainfall is rare in June, July, and August. The following table gives the altitude, temperature, and rainfall of the principal cities and towns of Dalmatia

WEATHER STATISTICS: DALMATIA

Localities	Altitude	Mean temperature			Rainfall
		January	July	Annual	
	Feet	*°F.*	*°F.*	*°F.*	*Inches*
Rab	20	42.26	75.56	56.12	----------
Knin [1]	787	41.18	75.74	58.28	42.32
Vrlika	1,312	35.60	71.78	54.68	----------
Drniš [1]	997	39.92	75.38	56.88	----------
Šibenik	10	43.88	78.08	60.08	51.54
Sinj [1]	1,069	37.04	70.88	54.68	46.92
Kaštel Stari	16	43.52	77.54	59.18	----------
Split	56	44.60	78.08	60.26	34.52
Zagvozd	1,526	36.68	73.76	55.04	----------
Vrgorac	692	39.56	79.44	59.00	----------
Hvar	30	47.48	77.18	61.34	31.33
Vis	82	50.64	77.18	62.06	----------
Gruž	20	47.30	78.26	61.52	56.65
Dubrovnik	66	48.56	78.62	62.60	----------
Ostri Rat	177	48.56	77.72	62.06	----------
Budva	33	48.02	78.88	62.78	56.00
Crkvice	3,609	32.36	65.12	47.84	182.12
Korčula	56	50.64	80.84	63.86	45.47

[1] Belongs to "Continental climate."

MONTENEGRO

With the exception of the littoral, which has a Mediterranean climate similar to that of southern Dalmatia, Montenegro has a continental climate and is cold in winter and warm in summer. The high mountains are usually snow-covered during the greater part of the year. The low-lying Podgorica plain has a mild climate, and ice very rarely forms on Lake Skadar. Rainfall is very heavy and fairly well distributed throughout the year. The following table gives the altitude, temperature, and rainfall of the principal cities and towns of Montenegro:

WEATHER STATISTICS: MONTENEGRO

Localities	Altitude	Mean temperature			Rainfall
		January	July	Annual	
	Feet	°*F.*	°*F.*	°*F.*	*Inches*
Cetinje	2,204	28.94	71.64	51.26	138.97
Kolašin	994	27.50	63.32	44.96	105.11
Nikšić	2,132	32.72	71.24	51.08	97.63
Podgorica	131	38.66	80.42	58.46	61.02

SLOVENIA

Slovenia belongs to the continental climate and has great extremes of temperature. At Celovac, for instance, the temperature ranges from 11.76° to 91.76° F., at Maribor from 2.48° to 91.22° F., and at Ljubljana from 0.4° to 88.7° F. The winters are bitterly cold and the summers mild. Rainfall is heavy, especially in the higher altitudes. The following table gives the altitude, temperature, and rainfall of the principal cities and towns of Slovenia:

WEATHER STATISTICS: SLOVENIA

Localities	Altitude	Mean temperature			Rainfall
		January	July	Annual	
	Feet	°*F.*	°*F.*	°*F.*	*Inches*
Celovac	1,444	20.48	65.84	44.96	37.79
Ljubljana	974	27.50	67.28	48.20	55.15
Celje	768	28.58	68.36	49.10	43.54
Postojna	1,788	30.02	65.48	47.66	52.67
Maribor	886	27.68	68.00	48.38	39.60
Snow regions	3,970	27.68	59.36	42.80	120.86

CROATIA-SLAVONIA

The narrow belt along the Adriatic has a Mediterranean climate, with moist, mild winters and warm summers. The mean temperature for January is 41° F. and that of July about 75° F. The rainfall is very heavy along the coast, where the annual precipitation reaches 80 inches. In the Karst Mountains which rise between the coastal range and Zagreb, the winters are cold and the summers mild, the mean annual temperature being about 42° F. This region is characterized by heavy snowfalls in winter. The mean annual rainfall in this section is above 40 inches. Further to the east in the big river

basins the average annual temperature is about 50° F. in the valleys and about 45° F. in the highlands. In this region there is little snowfall, and the precipitation rarely exceeds 25 inches annually. The whole of Croatia-Slavonia is subject to a cold northeastern wind (Bora) which is usually accompanied by heavy rains in the lowlands and by snowstorms in the mountains. The following table gives the altitude, temperature, and rainfall of the principal cities and towns of Croatia-Slavonia:

WEATHER STATISTICS: CROATIA-SLAVONIA

Localities	Altitude	Mean temperature			Rainfall
		January	July	Annual	
	Feet				*Inches*
Opatin	39	41.36	72.50	56.30	67.95
Gospić	1,846	27.50	66.02	47.30	64.01
Karlovac	394	29.66	70.16	50.36	40.39
Zagreb	898	30.92	70.88	51.62	35.39
Osijek	328	20.02	72.68	51.80	26.10
Mitrovica	292	28.58	73.32	51.98	----------

BOSNIA-HERZEGOVINA

The climate of Bosnia is characterized by winter and summer succeeding each other abruptly with practically no spring or autumn. The summer lasts from May to October and is cool and damp in the highlands and hot and oppressive in the valleys. Winter in the mountain regions is bitterly cold, but there is little snowfall. The precipitation is fairly evenly distributed throughout the year. The mean annual rainfall is about 32 inches, although in western Bosnia it goes as high as 45 inches.

The climate of Herzegovina is very cold in winter and extremely hot in summer. The temperature rises to 109° F. in the lowlands. The mean annual temperature is about 55° F. At Gacko a minimum temperature of 4° F. has been registered, while at Mostar a maximum of 109° F. has been recorded. Herzegovina is characterized by autumnal rains and summer drought. The "Bora" is frequent. As the precipitation percolates limestone soil and is carried off by subterranean streams, the region is usually arid and difficult of cultivation. The following table gives the altitude, temperature, and rainfall of the principal cities and towns of Bosnia-Herzegovina:

WEATHER STATISTICS: BOSNIA-HERZEGOVINA

Localities	Altitude	Mean temperature			Rainfall
		January	July	Annual	
	Feet	°*F.*	°*F.*	°*F.*	*Inches*
Prijepolje	1,450	28.76	68.36	49.40	29.52
Plevlje	2,525	25.34	63.32	45.32	39.86
Banja Luka	534	29.48	69.44	51.44	43.35
Bihać	745	30.20	69.44	21.44	59.13
Mostar	194	40.28	77.54	58.64	55.43
Gacko	3,149	26.96	64.40	46.94	59.17
Drvar	1,663	25.22	64.94	48.56	40.70
Sutorina	33	42.98	78.08	60.08	75.00
Sarajevo	2,090	26.24	65.66	48.38	37.04

VOIVODINA

The Voivodina is characterized by mild springs and autumns, cold winters, and hot summers. The frequency of the winds which sweep the Danube Valley makes this region one of rapidly changing temperatures. Precipitation is moderate, the heat in summer being tempered by frequent storms of short duration. Rainfall is heaviest during June and lightest during February. The following table gives the altitude, temperature, and rainfall of the principal towns and cities of the Voivodina:

WEATHER STATISTICS: VOIVODINA

Localities	Altitude	Mean temperature			Rainfall
		January	July	Annual	
	Feet	°*F.*	°*F.*	°*F.*	*Inches*
Pančevo	249	29. 66	74. 66	52. 16	26. 2
Subotica	273	28. 22	71. 42	50. 74	19. 4
Veliki Bečkerek	272	27. 14	72. 14	51. 08	19. 6
Velika Kikinda	272	27. 14	72. 86	51. 44	19. 8
Vršac	301	31. 28	74. 48	53. 24	23. 7
Sombor	295	27. 68	71. 06	50. 18	18. 3

SERBIA

The climate of Serbia and South Serbia (Macedonia) is characterized by cold winters and warm summers. The average temperature for January is around 29° F., and that of July about 70° F. Rainfall is not heavy, averaging about 25 inches annually. The following table gives the altitude, temperature, and rainfall of the principal towns and cities in Serbia:

WEATHER STATISTICS: SERBIA AND SOUTH SERBIA (MACEDONIA)

Localities	Altitude	Mean temperature			Rainfall
		January	July	Annual	
SERBIA	*Feet*	°*F.*	°*F.*	°*F.*	*Inches*
Belgrade	453	29. 66	70. 34	52. 16	24. 30
Bukovo	436	28. 76	72. 50	51. 98	21. 60
Čačak	689	27. 50	69. 80	50. 00	----------
Gradište	279	28. 22	70. 70	51. 62	----------
Banja-Koveljacka	407	30. 02	69. 98	50. 90	30. 77
Kraljevo	682	28. 76	68. 72	51. 26	31. 53
Kragujevac	597	29. 08	69. 08	51. 26	25. 07
Kruševac	656	26. 24	69. 08	51. 62	29. 99
Kuršumlija	1, 230	28. 04	68. 00	50. 18	----------
Leskovac	7, 480	28. 94	71. 24	51. 80	----------
Niš (Nish)	702	29. 12	70. 52	52. 16	23. 11
Paračin	423	29. 48	69. 98	51. 80	23. 38
Pirot	1, 204	28. 22	68. 18	50. 36	28. 66
Pozarevac	262	29. 30	71. 06	52. 16	23. 97
Prokuplje	984	29. 12	69. 80	51. 80	----------
Šabac	272	29. 26	71. 24	51. 80	24. 13
Smederevo	262	30. 56	72. 14	56. 24	25. 60
Soko Banja	958	27. 50	68. 90	50. 36	25. 90
Užice	1, 391	25. 52	64. 58	47. 50	33. 58
Valjevo	606	30. 02	69. 98	52. 16	29. 99
Vranja	1, 647	27. 32	69. 62	51. 26	28. 50
Vrnjci	741	28. 22	68. 54	50. 36	31. 29
Zaječar	423	28. 04	70. 52	50. 72	20. 82
SOUTH SERBIA (MACEDONIA)					
Novi Pazar	1, 801	26. 96	68. 54	49. 46	34. 25
Bitolj (Monastir)	2, 034	30. 20	71. 90	53. 06	28. 58
Skoplje (Uskub)	804	29. 48	73. 76	53. 24	19. 17
Prizren	1, 509	32. 54	70. 34	52. 88	----------

POPULATION [3]

The population of the Kingdom, according to the census of 1921, totaled 12,017,323 (now estimated at between 12,700,000 and 13,000,000), of which 5,893,547 were males and 6,123,776 females. The distribution of population among the various Provinces forming the Kingdom was as follows:

Provinces	Male	Female	Total
Serbia	2,007,331	2,122,307	4,129,638
Croatia-Slavonia	1,334,543	1,405,050	2,739,593
Bosnia, Herzegovina	965,894	924,035	1,889,929
Dalmatia	309,012	312,417	621,429
Slovenia	503,645	552,819	1,056,464
Voivodina	673,500	706,913	1,380,413
Montenegro	99,622	100,235	199,857
Total	5,893,547	6,123,776	12,017,323

DIVISION BY LANGUAGE

The Slavic tongue predominates in the Kingdom and is spoken by 10,146,111 persons. Of this total the Serbo-Croat language is spoken by 8,946,884 persons, the Slovenian language by 1,024,761, and all the other Slavic speech by 174,466 persons.

As is natural in a Kingdom surrounded by countries which are racially different, the border lands contain a fairly large population speaking foreign languages, as their native tongue, and of these the German, Hungarian, and Albanian elements lead.

The division of the population of the Kingdom by language is shown in the following statement:

Serbo-Croat	8,946,884	Rumanian and Koutzo-Vlachs	229,398
Slovenian	1,024,761	Italian	12,825
Other Slavonic speech	174,466	Other languages	196,368
German	513,472		
Hungarian	472,409	Total	12,017,323
Albanian	446,740		

DIVISION BY RELIGION

The different influences to which the various sections of the Kingdom have been subjected during its history have resulted in the division of the population into three large, and several small, religious denominations. The division of the population into religious sects is as follows:

Serbian Orthodox	5,602,227	Jews	64,159
Roman Catholic	4,735,154	Other creeds	17,636
Greek Catholic	41,597	Of no creed	2,016
Protestants	216,847		
Moslems	1,337,687	Total	12,017,323

[3] The figures given are for the year 1921 and apply to the territory within the frontiers existing at that time. Slight modifications of the boundaries have since occurred, but these have not greatly affected the population statistics.

DENSITY OF POPULATION

The density of population for the entire Kingdom is 125 inhabitants per square mile. This is about three and one-half times that of the United States, slightly larger than that of the State of Illinois (116), and about equal to that of the entire continent of Europe. The following table shows the density of population by Provinces, as well as the number of houses in each Province:

Provinces	Houses	Density of population per square mile	Provinces	Houses	Density of population per square mile
Serbia	427,142	137.79	Croatia-Slavonia	487,571	161.88
South Serbia (Macedonia)	249,863	81.66	Slovenia	186,179	168.87
Montenegro	39,883	53.61	Voivodina	261,837	181.46
Bosnia-Herzegovina	322,973	95.37			
Dalmatia	116,905	126.39	Entire Kingdom	[1] 2,122,353	125.10

[1] Total of provinces listed adds to 2,092,353.

MOVEMENT OF POPULATION

In the Kingdom of the Serbs, Croats, and Slovenes the statistics of the movement of population comprise only emigrants to oversea countries and emigrants returning from such countries. This movement of population since the formation of the Kingdom on December 1, 1918, was as follows:

Years	Emigrants			Returning emigrants
	Male	Female	Total	
1919 [1]			291	7,324
1920			5,988	18,980
1921	5,102	7,863	12,965	8,163
1922	2,872	3,214	6,086	6,588
1923	5,717	3,653	9,370	1,981
1924	11,587	5,651	17,238	5,159
1925	9,757	5,248	15,005	5,691
Total			66,943	53,886

[1] From end of World War to Dec. 31, 1919.

In the beginning, the number of returning emigrants greatly exceeded the number leaving the country, but from 1920 through 1923 there was a steadily decreasing number of returning emigrants, while emigration was increasing. In 1924, however, the number of returning emigrants increased. This was due to the fact that a large percentage of the emigrants who left the Kingdom during the heavy emigration years returned to visit their native land.

The restriction of immigration into the United States is diverting a large number of emigrants to Brazil, the Argentine Republic, and Canada, and each year shows an increasing trend to these countries, as is evident from the following figures:[4]

[4] Such figures for 1919 and 1920 do not exist.

Years	United States	Canada	Argentina	Brazil
1921	12,461	87	304	----------
1922	5,436	179	290	63
1923	4,130	717	2,721	1,535
1924	2,125	1,941	3,860	6,862
1925	2,188	2,436	2,247	7,053

Of the total number of emigrants, more than 50 per cent belong to the agricultural element, and only about 30 per cent range between 18 and 30 years of age.

The above emigration figures all apply to subjects of the Kingdom. In addition to these, 2,638 foreigners left the Kingdom for oversea countries during 1924.

There is comparatively little present emigration to the neighboring countries, as the vast majority of the people who, for various reasons desired to live in the adjoining States changed their domicile immediately following the establishment of the new frontiers.

PRINCIPAL CITIES OF THE KINGDOM

According to the census of 1921, there were 17 cities in the Kingdom of more than 25,000 inhabitants, their combined population totaling 807,704. In 1926, the combined population of these 17 cities was estimated at slightly more than 1,000,000 or about 7.7 per cent of that of the entire Kingdom.

BELGRADE

Belgrade, the capital and largest city of the Kingdom of the Serbs, Croats, and Slovenes, is situated on a bluff overlooking the confluence of the Save and Danube Rivers.

The population, according to the census of 1921, was 111,740, but the number of inhabitants in 1926 is estimated at 200,000.

Steamer services connect it with Budapest, Vienna, Turnu Severin, and Giurgiu on the Danube; Šabac and Sisak on the Save; and Osijek on the Drave. It is an important railway center from which trunk lines run to Zagreb, Trieste, Paris, Vienna, Budapest, Saloniki, Athens, Sofia, and Constantinople.

The water supply is obtained from a number of artesian wells located a few kilometers from the city. The increase in the population, however, has rendered this supply inadequate and has resulted in the pumping of water from the Save River for industrial and non-drinking purposes. An increase of the present potable water supply is planned for the near future.

There is a modern sewerage system which serves the center of the city and which in former days was entirely adequate, but the growth of the city now renders the extension of this system necessary.

The municipal electric plant supplies lighting and power for the industries and the street railways. It has a capacity of 1,000 horsepower. The rapid growth of the city, however, makes the extension of this plant imperative and the municipality is now actively engaged in studying this problem. The street railways which are operated by the municipality have a total length of 30 kilometers and not only serve the city but link it with Topčider, a park 3 kilometers to the south of Belgrade.

The sanitary conditions of the city may be characterized as good. Proper medical, dental, surgical, and hospital treatment is obtainable.

There is a municipal fire brigade which, owing to the infrequency of fires, is normally adequate for the needs of the city, although its equipment is small.

There is a national theatre which presents both drama and opera. Amusement is also furnished by eight motion-picture houses.

The leading hotels frequented by the better class of travelers are all modern.

Belgrade is not only the capital but the commercial center of the Kingdom. Its location at the junction of the Save and Danube Rivers makes it one of the most important transportation centers

in eastern Europe. It ranks second to Zagreb as a banking center. The headquarters of the National Bank, a stock exchange, and a produce exchange are all located in the city.

ZAGREB

Zagreb, the second city of the Kingdom, is situated on the Save River in the central part of Croatia-Slavonia, of which it is the metropolis. It is connected by standard-gauge railroads with Trieste, Belgrade, Sušak, Split, Šibenik, and Vienna. The population according to the census of 1921 was 108,338, but the number of inhabitants is now estimated at 150,000. The city is modern, and its streets are wide and well paved with asphalt or granite blocks.

The water supply comes from artesian wells located at a short distance from the city. The capacity of the storage reservoirs totals 160,000 hectoliters, from which about 31,000 cubic meters of water are pumped into the city daily. A modern, efficient sewerage system serves practically the entire city, the outlet being the Save River a few miles below the municipal limits.

An electric plant furnishes power for lighting, for an extensive street railway system, and for industrial purposes. The municipal gas factory is the largest in the Kingdom and supplies practically all of the street lighting. In private residences, gas is used for cooking and heating.

The sanitary conditions are excellent, the annual mortality being about 23 per 1,000. As the health department is well organized, epidemics are rare. Adequate medical attention and hospital service are available.

The city possesses a fire brigade which is efficiently organized and well equipped.

Its leading hotel is considered the most luxurious in the Kingdom. A handsome edifice houses the State Theater, in which both opera and drama are presented. There are a number of motion-picture theaters in the city.

Zagreb is the commercial center not only of Croatia-Slavonia but also of a considerable portion of Bosnia. With its 66 banks it ranks as the most important banking center in the Kingdom. One of the two stock exchanges of the Kingdom is located there. Zagreb is also industrially important, outranking any other city of the Kingdom in this respect. The industrial output covers a considerable range of products, chief among which are wood products, chemicals, paints, varnishes, fertilizers, sulphuric acid, soap, oils, cosmetics, machinery, tools, leather goods, textiles, and food products.

SUBOTICA

Subotica is about 10 kilometers from the Hungarian frontier, is located in the plain formed by the Danube River basin, and is on the Belgrade-Budapest railway trunk line. It is the largest city of the Voivodina and the third largest city of the Kingdom. The census of 1921 showed 101,857 inhabitants, but the population in 1926 is estimated at 110,000.

Subotica has no waterworks, its water supply being obtained from approximately 50 non-flowing artesian wells of about 40 meters depth which are placed at convenient points in the city. About the

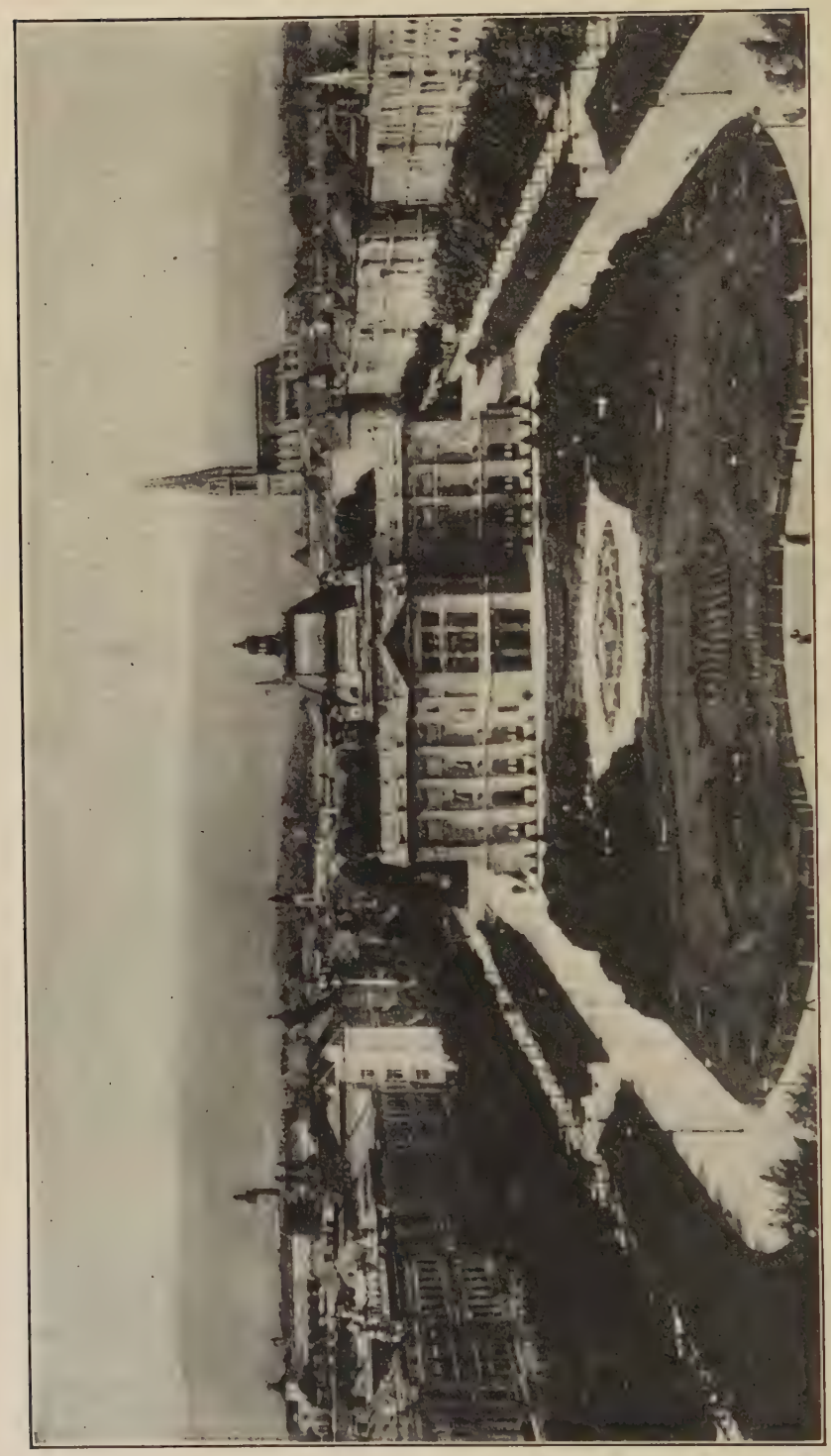


FIG. 3.—Square at Zagreb, Croatia-Slavonia

same number of private wells are in use. The streets are well paved and clean.

An electric plant supplies public and private illumination and energy for the street railways. The electric plant which was founded in 1897 is the property of an American company since 1924. The plant has a capacity of 3,000 horsepower. The electric company operates 14 kilometers of street railways which serve the city and connect it with Palić, an adjacent lakeside summer resort.

The sanitary conditions of the city, which has an elevation of 118 meters, are good but would be considerably improved by the installation of waterworks and a sewerage system.

The city has a fire brigade and a number of volunteer firemen who can be mobilized on short notice. These two departments are well organized, but they are greatly handicapped by the lack of modern equipment.

The three hotels in Subotica are modest both in appointment and service. There is one small theater used occasionally by amateurs and by traveling companies.

Subotica, which owes its importance to the fact that it is situated in the large grain-producting region of the Danube, is one of the largest agricultural centers in the Kingdom. The principal trade is in grains, poultry, eggs, hogs, cattle, hops, and hides, of which considerable quantities are exported to foreign countries. It also serves the region as a purchasing center for farm equipment.

There are a number of industrial plants manufacturing bricks, cement ware, chemicals, ironware, and furniture, which supply the needs of the immediate community but which, despite abundant raw materials and comparatively cheap labor, have not been further developed because of lack of capital.

SARAJEVO

Sarajevo, the largest city and former capital of Bosnia, is situated in the center of that province. The old quarters still preserve their Turkish aspect, while the modern sections of the city possess a number of imposing public buildings erected during the Austro-Hungarian régime. The census of 1921 showed a population of 66,317, but the present number of inhabitants is estimated at 75,000. It is consequently the fourth largest city in the Kindgom. Thoroughfares in the center of the city are paved with asphalt or granite blocks, while the remainder are macadamized or paved with cobblestones.

It is connected by a narrow-gauge railroad line with Gruz and Zelenika on the Adriatic, as well as with the Trieste-Zagreb-Belgrade trunk line. Water is obtained from two wells located outside of the city, the storage reservoirs totaling over 2,000 cubic meters. The sewerage system in the center of the city, which is low, carries rain water and refuse, while in the higher section of the city there is one set of sewer pipes for rain water and another set for refuse. The town is lighted by both gas and electricity. The gas plant has a production of 200 cubic meters, of which one-third is used for public lighting and the remainder for private needs. There is also an electric power plant with a total capacity of 1,800 horsepower and a supplementary hydroelectric plant with a capacity of 800 horsepower. About 20 per cent of the energy from these stations is reserved for

municipal lighting, and 80 per cent is used for private and industrial purposes. The capacity of the plant is not equal to the demand for energy. The electric street railway lines total 8 kilometers. The sanitary conditions are satisfactory, and adequate hospital service and medical attendance are available. The fire brigade is well trained, and its equipment includes 95 electric fire alarms distributed throughout the city. There are no theaters, but there are several motion-picture houses.

Sarajevo is the most important market center of Bosnia, to which native products are brought for sale and provincial merchants come for replenishing their stocks.

LJUBLJANA

Ljubljana, the largest city and former capital of Slovenia, is situated in the Dinaric Alps in the extreme western section of the Kingdom.

The census of 1921 showed a population of 53,321, but present estimates place the number of inhabitants at 60,000.

It is an important railway center, being on the Trieste-Zagreb-Belgrade and Zagreb-Vienna trunk lines. It has easy access to the ports of Trieste, Sušak, and Fiume.

The principal thoroughfares are paved with asphalt or granite blocks. The unpaved streets are macadamized.

Water for the city is pumped from artesian wells into five reservoirs having a total capacity of 3,030 cubic meters. The sewerage system serves the entire city with the exception of a suburb which was incorporated immediately prior to the World War.

The municipal power plant supplies the greater part of the electricity for lighting and industrial purposes, but a hydroelectric station at Tacna supplies a small part of the energy.

Gas for industrial purposes and street lights is produced by a plant which consumes imported coal. The electric street-railway lines are owned and operated by a private company of Vienna. The city is healthful and affords adequate medical service.

Fire protection is provided by one professional fire brigade and four voluntary companies of firemen.

The leading hotels are comfortable.

There are three motion-picture houses and several theaters, two of which are municipal. One presents opera and the other drama.

Ljubljana, which is the commercial center of Slovenia, is the principal city of the most industrial Province of the Kingdom. In or near the city are found factories for the manufacture of leather, glue, paper, and tobacco as well as iron foundries, machine shops, and breweries.

SKOPLJE (USKUB)

Skoplje (or Uskub) is the largest and most important city of South Serbia. It is on the Belgrade-Saloniki trunk line and is the terminal of a standard-gauge line running to Mitrovica, as well as of a narrow-gauge railway to Ohrid. The census of 1921 showed a population of 41,066, but the present estimates give 50,000 inhabitants. Lighting is supplied by an electric plant which has a capacity of 180 horsepower. As this is entirely inadequate for the actual demands, a project has been prepared for the construction of an electric central

of 3,000 H. P. capacity. There are no street railways and no sewerage system. The water supply is obtained from wells. Adequate medical service is obtainable at the Government hospital.

The principal streets are paved with cobblestones, and the others are macadamized.

The leading hotels furnish modest accommodations. There are two motion-picture theaters. The importance of Skoplje is due to the fact that it is the commercial and distributing center for South Serbia and is the principal market in the Kingdom for hides, skins, and opium.

NOVI SAD

Novi Sad is situated on the banks of the Danube in the center of the Voivodina. According to the census of 1921 the population was 39,147, but the 1926 estimates place the number of inhabitants at 45,000.

As a Danube River port, it ranks second in this Kingdom to Belgrade. It is also the southern terminus of the King Alexander Canal.

The Budapest-Belgrade Railway trunk line traverses the city, while six secondary railroads furnish transportation into the surrounding country.

A large majority of the streets are of asphalt, and the others are to be paved in the near future. There being no sewerage system, surface drainage into the river affords the only means of disposing of waste matter. The water supply is obtained from the river and from wells. The municipality is planning to solve at an early date the question of providing waterworks and an adequate sewerage system.

There is a lighting and power plant which furnishes electric lights for the city and private homes and a considerable amount of energy for industrial purposes. The total annual consumption of electric power amounts to 3,500,000 kilowatts. A street railway traverses the principal thoroughfares of the city.

There is a fire brigade with modest equipment which amply serves the needs of the community.

There are three leading hotels which furnish fair accommodations.

A government theater and three modestly equipped motion-picture houses provide entertainment.

Health conditions are normally good, as the climate is salubrious. In summer months it is much frequented by visitors who are attracted by the bathing beach on the Danube.

Novi Sad is essentially a trade center for the Voivodina. The largest of the three produce exchanges in the Kingdom is located there. The farming elements ship their products and purchase their supplies through this market. It is an important industrial center, the principal enterprises being milling and the manufacture of candies, cakes, alimentary paste, canned goods, soap, chemicals, electrical equipment, sausages, and cement ware.

OSIJEK

Osijek is the largest port on the Drave River and is situated near the point where that waterway enters the Danube.

According to the census of 1921 its population was 34,412, but the 1926 estimates give it 40,000 inhabitants.

The streets are well paved. There is, however, no sewerage system or waterworks. A municipal electric plant with a capacity of 2,000

kilowatts has been erected by an American firm. The same company has constructed a street-railway system comprising 12.5 kilometers of track.

There is a national theater which presents opera and drama, as well as three motion-picture theaters.

There are two leading hotels.

The city is important as a distributing center for grain and as a purchasing market for the surrounding country districts.

The principal industries are the manufacture of textiles, matches, candies, furniture, brick, tiles, electric equipment, and iron products.

BITOLJ

Bitolj is the second most important city in South Serbia. It is situated at a short distance from the Greek frontier. The census of 1921 showed a population of 28,418, but the number of inhabitants is now estimated at about 35,000. It is connected with Greece by a standard-gauge railroad and with the Belgrade-Zagreb trunk line by a narrow-gauge line.

An electric plant furnishes the lighting for the city but is not large enough to provide power for industrial purposes. The principal streets are paved with cobblestones. Practically every house has its own well. The city is in a section in which malaria is prevalent, but the Bitolj bacteriological station is successfully combating this disease. There is a civil hospital as well as a military hospital. A fire brigade furnishes the necessary protection against conflagrations. There are two principal hotels. There are also two motion-picture houses and one theater. In addition to a branch of the National Bank, the Franco-Serb and Savske Banks, both of Belgrade, maintain branches in Bitolj, which is an important commercial center for the trade with Albania and Greece. The lack of capital has prevented any important industrial development.

NIŠ (NISH)

Niš (Nish), the old capital of Serbia, is situated 220 kilometers southeast of Belgrade. It is a railway center of considerable importance, as it is the junction point of the Belgrade-Saloniki and Belgrade-Sofia trunk lines, as well as the terminus of the standard-gauge line running north to the Danube River at Radujevac. The population, according to the census of 1921, was 25,096, but it is now estimated at 30,000 inhabitants. The streets are either paved with cobblestones or macadamized. Water is obtained entirely from wells. There are no street railways and no sewerage system. A hydro-electric plant supplies current for lighting and for a small amount of power for industrial purposes. The capacity of the plant is inadequate for the needs of the city, and it is proposed to erect a new central as soon as capital can be found for this purpose. It is the seat of a large government hospital. There are three leading hotels and two motion-picture theaters.

Niš is the commercial center of the southern and eastern part of the old Kingdom of Serbia. Its commercial importance is enhanced by the fact that it is an important railway center. It is an important collecting point for hides, skins, and wool, and serves as a distributing center for a large region.

SPLIT

Split (Spalato) is situated on the Adriatic coast midway between the Italian and Albanian frontiers. The port, which is connected with the hinterland and the Trieste-Zagreb-Belgrade trunk line by a standard-gauge railway, is the most important in the Kingdom.

The population, according to the census of 1921, was 25,042, but the 1926 estimates place the number of inhabitants at 35,000.

The city is modern in aspect, and the principal thoroughfares are all paved. The waterworks date from ancient times, but they were modernized in 1878. There is a sewerage system which serves the center of the city but which requires extension in order to meet the needs of the growing city.

There are two electric power stations of 250 kilowatts and 150 kilowatts, respectively, which furnish current for municipal and private lighting and for industrial purposes. There is also a municipal plant which supplies gas for household needs. The city has no tramway system. A voluntary fire brigade was organized about 40 years ago, but it lacks modern equipment. There are two motion-picture theaters and three good-sized hotels. A large modern hotel is greatly needed.

Split is the best developed port in the Kingdom, an important shipping center, and a much frequented tourist resort. The old Roman monuments, the picturesque scenery, and the delightful climate are the principal attractions.

DUBROVNIK

Dubrovnik (or Ragusa) is situated in the southwestern part of the Kingdom on the Adriatic sea. The census of 1921 showed a population of 13,358, but the number of inhabitants is now estimated at 15,000. It is served only by a narrow-gauge railway line running from Zelenika on the Bay of Kotor through Sarajevo to Brod on the Trieste-Belgrade trunk line. The port of Gruž is a part of this municipality, and its importance is derived chiefly from that fact.

There is a sewerage system dating from the 14th and 15th centuries which still renders good service. There is one electric power plant owned and operated by a foreign company which furnishes lights for the municipality and private homes, as well as the energy for the street railway connecting Dubrovnik with the port of Gruž.

The electric station is now recognized as being inadequate for the needs of the city and port, and plans are now under way to enlarge the undertaking. The street railways are owned and operated by a local concern.

Dubrovnik is a health resort of considerable reputation, where adequate hospital facilities and medical attendance are available. Fire protection is furnished by a small but well-equipped fire brigade. There are several well-appointed hotels and one small theater in which motion pictures are shown and other forms of entertainment are given.

The importance of Dubrovnik is based largely upon the fact that it is a commercial center for the southwestern part of the Kingdom and it (Gruž) is also a transit port of considerable importance. It also carries on a considerable direct trade with Italy and Albania. The natural beauty of its location, which recalls the Riviera towns of Italy and France, makes it the mecca for an annually increasing number of tourists.

ECONOMIC AND SOCIAL CONDITIONS

The social and economic conditions of the inhabitants of the different regions of the Kingdom vary considerably as a direct consequence of the diverse political and cultural influences to which they have been subjected and in direct proportion to the length of time during which such influences were effective. The modifications in the character and life of the people as a result of these influences were greater in the cities and populous communities than in the sparsely settled rural districts. The predominance of Austria and Hungary over those sections which were formerly part of the Dual Monarchy had a more pronounced effect upon Slovenia, Croatia-Slavonia, and the Voivodina than in Bosnia-Herzegovina, where they supplanted the Turk only in 1878, and in Dalmatia, where the Italian influence was little modified by the century of Austrian control.

The population of Serbia and Macedonia have undergone only the suppressive influence of the Turkish domination, which has left little imprint upon the Slav characteristics and customs of the people other than that of retarding their economic development.

In the retention of its independence and its freedom from foreign control, Montenegro utilized all of its energies, leaving little to expend upon the development of the social conditions of its people.

LIVING CONDITIONS

As regards living conditions the population is divided into three elements—the rural, the urban, and the labor.

RURAL ELEMENT

The rural or agricultural element constitutes about 85 per cent of the population of the Kingdom. The members of this class live in villages or communities from which they go out to till their lands. Isolated farm houses are rare. In Serbia, South Serbia (Macedonia), and Montenegro the farms are invariably small, averaging less than 20 acres, and are cultivated by the proprietors and their families, who live for the most part from the produce of their lands. Even the material for their clothing is in major part home-woven. Their consumption of store goods is small, and practically the only imported articles consumed by them are cotton goods, sugar, rice, coffee, and kerosene. Their houses are usually of one story, of brick and stucco construction, and simply furnished. Their farming stock, as a rule, consists of a horse or two, two oxen, a cow, and a small number of pigs, sheep, goats, and fowls. Their farm equipment comprises a small plough and such simple implements as spades, hoes, and rakes.

In Croatia-Slavonia and the Voivodina the farms are larger, and in pre-war days there existed a number of very large estates, which have now been broken up by the agrarian reform. Formerly, the larger types of farm machinery such as tractor-hauled plows, cultivators,

and threshing machines were in extensive use on such estates, but, since their division into small peasant farms, the larger types of machinery have fallen more or less into disuse. The standard of living of the agricultural population in these regions very nearly approaches that of the peasantry of Austria. Slovenia, however, is the industrial center of the Kingdom, and living conditions there compare with those of western European countries.

Bosnia-Herzegovina gives more evidence of Turkish influence than the other regions of the Kingdom. The land was formerly divided into large estates owned by "Begs," but under the agrarian reform they have been broken up into small farms. The rural habitations are usually two-story houses with high gabled roofs and latticed windows. The second story, the walls of which project beyond those of the lower story, serves as living quarters for the family, while the ground floor is entirely devoted to the storage of farm produce and to the housing of live stock. The Moslem element still preserves Turkish habits, and the women have not yet discarded the veil. Their standard of living is similar to that in Turkey and the Near East, while the non-Moslem element lives in very much the same way as in Serbia. In Dalmatia, the habitations, as well as the methods of living, correspond very closely to those of Italy.

Throughout the entire Kingdom the peasant has a distinctive costume, the details of which vary in each region. The male peasant costume almost invariably consists of a cotton blouse, homespun woolen trousers, homespun multicolored woolen stockings and a short "Spanish" or "Eton" jacket, which may be of the same material as the trousers or, in the case of well-to-do farmers, of broadcloth richly embroidered in gold or silver. The costumes of the women are very similar to those of the men, the only real difference being that they wear wide skirts of homespun and a heavy variegated apron of home-woven woolen fabrics. In winter, both sexes wear sheepskin coats to protect them against the rigors of the climate. The footwear consists of "opanki," a form of stiff pointed moccasins, which are made either on the farm or by the village cobbler. The forms of the "opanki" vary slightly in the several Provinces. Variations in the headdress constitute the principal divergence in the costume of the peasants of the different localities.

The food of the peasant class is usually frugal, consisting, as a rule, of black bread or corn bread and of vegetable soup, the principal ingredients of which are cabbage, beans, potatoes, and onions. White cheese ("Kaimak," a form of butter made from the skimmings of boiled milk) and green and red peppers cooked in every conceivable form are articles of general consumption. In summer, meat (usually lamb, mutton, or pork) is served only on Sundays and feast days, while in winter jerked beef is a part of the daily diet. In the Voivodina the peasant's fare is more ample than in the other parts of the Kingdom, and meat or poultry is served practically every day. During the period of work in the fields the midday meal consists of meat boiled with vegetables—brought out to the workers by the women folk at noon.

The fuel of the rural element is invariably wood. Kerosene lamps and candles furnish the light.

URBAN ELEMENT

The well-to-do classes of the cities are cosmopolitan, having been educated as a rule in foreign countries. As no titles of nobility exist in the Kingdom, the wealthier and more educated elements, formed of Government officials, members of the various professions, and the more prosperous merchants, constitute the "aristocracy." Their dress is patterned after Paris or Vienna models, and in general they maintain a western European standard of living.

In those cities which were formerly part of the Austro-Hungarian Empire the wealthier element has always resided in apartment houses or in villas built on the outskirts of the town. In Serbia, however, the pre-war houses of the better classes in the cities were one-story residences with gardens. The influx of the rural population to the cities immediately following the war resulted in the construction of a large number of apartment houses, and these to-day are rapidly supplanting the individual houses as the homes of families in comfortable circumstances. The Government fostered the building program which was necessary to relieve the crowded condition of the cities by exempting new structures for a period of years from the payment of all State taxes.

The poor class in the cities lives in one or two room houses usually built around a court. These dwellings are cheaply and simply furnished and are usually heated by the kitchen stove and lighted by kerosene lamps or candles. The condition of this class is becoming more and more difficult as a result of the steadily increasing cost of living.

The class of government functionaries occupies an economic position midway between the poor class and the well-to-do. They are usually well educated and their mode of living is similar to that of the better classes, but, as their salaries are small, they are obliged to live in a very restricted and frugal manner.

COST OF LIVING

The cost of living of the upper classes in the cities is high. Owing to the rapid postwar increase of the urban population, the housing problem became exceedingly acute, and has not been entirely relieved despite the construction of a great number of new residences in the principal cities, Belgrade and Zagreb. Furnished houses and apartments are exceedingly rare. It is usual to rent either an unfurnished house or apartment and to purchase the necessary furniture and furnishings. Unfurnished apartments in the better quarters of the city rent for the equivalent of 1,200 dinars to 1,500 dinars[5] per room monthly. Thus an apartment consisting of four small rooms, bath, and kitchen rents for 5,000 dinars or more. Apartments of seven or eight rooms, including a large drawing room and a large dining room, are difficult to find, and their rental ranges from 10,000 to 15,000 dinars[6] per month, depending upon the location and the arrangement of the rooms. Only a few of the more recently constructed houses have elevators and central heating. Practically all of the residences are heated by a tile stove in each room, while each bathroom is fitted with a wood-burning water heater. Servants are easy to obtain, but

[5] February, 1926.

[6] Rate of exchange, $1 equals 56 dinars.

as a rule they are not trained. The monthly wages of serving maids average about 600 dinars and those of female cooks about 700 dinars. Male servants are paid about 800 dinars a month. All of these servants receive lodging and food in addition to their money wages, and it is customary to supply the clothes in which they serve. Chauffeurs receive about 3,000 dinars a month, but if board and lodging are supplied, their money wages are reduced by half. Laundry for a family of four and two servants costs about 200 dinars a week. Wood constitutes the only household fuel in general use. A cord of wood, sawed and split, costs about 875 dinars. Electricity is in general use for lighting purposes, the charge per kilowatt hour in Belgrade being 5.50 dinars, provided the monthly consumption does not exceed 100 such units, otherwise the rate is 7.50 dinars.

Most of the imports of articles of general consumption are used by the well-to-do element. Practically all of the clothing of the members of this class comes from abroad, and in addition they are fairly large consumers of articles of luxury, modern appliances, and household equipment from foreign countries.

FACTORS AFFECTING LABOR

There is no well-defined labor element in the Kingdom. Mines and industrial plants are usually worked by persons from the rural districts who regard such employment as temporary and, after short periods of service, drift back to the farms. In the absence of definite statistics the labor element may be estimated, on the basis of the number of insured workmen,[7] at 600,000 individuals, or 5 per cent of the total population. As mines and industrial plants are, in the majority of cases, located in small communities, the housing problem has been solved by the erection by the companies of small dwellings and barracks for the laborers. Such lodgings are supplied in addition to the pay and constitute a part of the wage of the employees. It is also usual for the management to maintain a commissary from which common articles of necessity may be purchased at prices lower than those obtaining in retail stores.

Prior to the World War the average price of adult unskilled labor was 50 dinars ($9.65) per month as compared with the 1925 average of 887.71 dinars (about $15 at the average rate of exchange during the year). The index figures for 1925 showed that wholesale prices of articles of general consumption were 18 times their 1913 level and rents 30 times their pre-war rate, whereas dinar exchange had only depreciated to one-twelfth of its pre-war value. It should be remembered that 1913 was also a war year for the Serbs and that the prices of that period were above normal.

LABOR MARKET

Immediately following the World War, labor conditions in the Kingdom were entirely disorganized, and it was necessary for the National Government to furnish doles and food to a part of the population. American relief organizations also contributed in a large measure to relieve the stress. The reduction in the number of laborers out of work was brought about by the demand for labor

[7] 475,721 carried insurance in 1924.

resulting from the construction and repair of railway lines and by the erection in the larger cities of an unusual number of residences and other structures. The activities in these two lines were able to absorb by far the greater portion of the unemployed, even including thousands of farm laborers, overseers, forest guards, and the like, who lost their positions as a result of the partition of the large farms under the agrarian reform. Again, emigration to the United States and other countries had been of distinct assistance in stabilizing the labor market. At the present time, despite the decrease in construction work, the number of unemployed is so small as not to constitute an important factor in the economic situation.

LABOR LEGISLATION

PROTECTION OF WORKMEN

The Government has taken great interest in the improvement of labor conditions, and to this end has voted a law for the protection of workmen and a law for the compulsory insurance of workmen. The former act, which went into effect on June 14, 1922, deals with the relationship between the employers and the employees other than those who occupy such high positions as not to fall within the class of "wage earners." This law defines their relations to each other, as well as to the State. It is provided that in case of controversy between employers and employees the State shall act as arbitrator and its decision is final. The function of arbitration rests with the Ministry of Social Politics.

HOURS OF LABOR AND WORKING CONDITIONS

The working time of hired labor in all mining, industrial, and commercial enterprises, whether public or private, is limited to 8 hours a day and 48 hours a week. But it may be extended to 10 hours, if four-fifths of the workmen give their consent to such an extension. The pay for overtime must be at least 50 per cent more than the normal wage. Women of all ages and minor children under 18 years of age must not be employed at night work, while children under 14 years of age must not be employed in any form of work. It is forbidden to have pregnant women at work within two months before and two months after their confinement. If women are employed who have nursing infants they must be given time off to nurse them, and nurseries must be provided.

The owners of any enterprise shall see that all workrooms, as well as all machinery and material used, constitute no danger to the life or health of the workmen. Owners of concerns situated more than 3 kilometers out of town and employing more than 100 workmen are required to establish and maintain at their expense an emergency hospital for first aid to sick or injured workmen and the necessary lodgings for the accommodation of the workmen of the concern.

LABOR ORGANIZATION

Laborers are authorized to establish organizations for the protection of their economic, cultural, and moral interests.

In addition to this permissive legislation, the law becomes mandatory as regards the formation of representative labor bodies to be

known as "chambers of labor." These chambers are created by the State, and their dealings are with the employers. Each of these chambers has jurisdiction within a definite area, and in general there is one chamber for each Province within the Kingdom.

EMPLOYMENT BUREAUS

The law provides for the organization of a central Employment Bureau at Belgrade and local employment bureaus in all the more important industrial centers. These bureaus are the auxiliary offices of the Ministry of Social Politics, which exercises direct control over them and supports all expenditures for their maintenance.

No employer is allowed to import workmen from foreign countries without special permission from the Ministry of Social Politics, which issues such permits only after hearing the advice of the local employment bureau and the local chamber of labor.

In case of strikes the employment bureaus may not assist an employer until the strike is ended.

The bureaus not only assist workmen to find employment, but, in case of need, supply food, lodgings, and traveling expenses to unemployed workers.

LABOR DELEGATES

The law provides for the creation in every industry of officers to be known as delegates, who, although working people and elected by working people, serve the interests of the employer as well as of the employees.

Their duties include (1) the promotion of good relations between the employer and the workmen, (2) participation and collaboration in the making of collective contracts between employers and workmen, (3) assistance in enforcing strict compliance on the part of both employer and employes with these contracts, (4) acting as intermediaries between employers and workmen in case of disputes arising out of the working relations, such as questions of wages, with the object of settling them peacefully; when unsuccessful and a strike is imminent, they are required to solicit the intervention of the Government authorities.

WORKMEN'S INSURANCE LAW

The compulsory insurance of workmen is provided by the workmen's insurance act which went into effect on July 1, 1922.

The obligation of insurance rests equally upon the workman and upon his employer. This applies to practically all classes of laborers except those engaged in agriculture and those who are only casually or irregularly employed.

The insurance provided for in this act is against pecuniary loss by reason of the sickness of, or an accident to, the insured.

MEASURES TO PREVENT STRIKES

During 1920, owing to a steadily increasing tendency on the part of the employes of railways and mines to voice dissatisfaction by means of strikes both for the purpose of securing higher wages and for political effect, the Government issued two decrees, dated December 15, 1920, and December 24, 1920, respectively, which provide

that in the case of a strike or the threat of a strike such employes may be mobilized and these services operated by the military forces of the Kingdom. These two decrees have proved so effective that there have been no strikes on the railroads and few strikes in the mines since their promulgation. All of the latter were due primarily to the demand for increased wages to meet the rising cost of living and were generally settled in favor of the strikers.

UNIONS OF TRADESMEN

As a natural corollary of the organization of the laboring element, the shoemakers, tailors, carpenters, artisans, and tradesmen have their own unions. In Serbia, South Serbia (Macedonia), and Montenegro the formation of such unions was made compulsory by the business law of June 29, 1919. Under the provisions of this law any person opening a shop or establishing a trade must become a member of the local union before he can secure a license to engage in business. In the Kingdom there are 127 of these unions, the principal functions of which are to improve conditions in the various trades and to protect the interests of their members. The head organ of these unions is the Chamber of Trade which functions at Belgrade, as a supervisory authority.

The Chamber of Trade has administrative, judicial, and advisory functions. The administrative functions consist in collecting statistical data, approving the budgets of the various unions, issuing permits for the registration of trade enterprises, ratifying the election of the members of trade unions, and similar duties. Its judicial functions comprise the right of assessing fines up to a maximum of 1,000 dinars against persons engaged in illegal or unlicensed business. The principal feature of its advisory functions is to formulate opinions on all projects for laws on economic subjects for consideration by the legislative branch of the Government.

The number of tradesmen in Serbia, South Serbia (Macedonia), and Montenegro totals nearly 32,000. They represent from 5 to 10 per cent of the village population and from 10 to 30 per cent of the population of the larger centers. About 40 per cent of the tradesmen of these regions are either blacksmiths, shoemakers, bakers, wagon makers, or carpenters.

AMUSEMENTS

COFFEEHOUSES

As is natural with an agricultural people, the amusements of the population are simple in character. In the country districts the "kafana," or coffeehouse, is the gathering place for the people of the community. Here, politics and daily events are discussed over innumerable cups of Turkish coffee, which is about the sole heritage that the South Slavs have received from the Turks. The alcoholic beverage in Serbia and Bosnia is "slivovica," or plum brandy, and in the other Provinces "rakia," which is distilled from grain. Holidays are usually celebrated in the open, where barbecued pig or lamb forms the principal article of diet. At such gatherings it is usual to have a "tzigane" (gypsy) orchestra, to the music of which the peasants dance the "kolo," a kind of round dance, the rhythm

and step varying in each Province. On Sundays, after the religious service, the "kolo" is danced in the village square, which is usually in front of the church.

THEATERS AND MOTION PICTURES

In the cities the theaters and motion pictures furnish the principal amusements other than dancing and card playing. No private theaters in the country are authorized to present opera, but several small organizations give drama and spoken comedy acts. However, there are a great number of cabarets having small variety and musical shows. Even the smallest cafés have their own tzigane orchestras.

The larger theaters are subsidized by the State and financed by the Government. The budget for 1924–25 carried provisions for grants to theatrical companies and musical societies totaling about $275,000. In addition to State aid, such organizations frequently receive municipal subsidies. The subsidized theaters present opera, both foreign and domestic dramas, ballets, and orchestral concerts. The companies are formed of local talent or of Russian refugee artists. Opera is produced at Belgrade, Zagreb, Ljubljana, and Osijek.

RADIO

The use of radio, owing to Government restrictions and to the lack of local broadcasting stations, has not become extensive. A few private receiving sets were installed, but these had to be of the more expensive type in order to obtain satisfactory results from foreign broadcasting stations.

The first radio broadcasting station was erected on the outskirts of Belgrade in 1924 but has ceased to function.

A broadcasting station was erected in Zagreb in 1926, and, the Government's restrictions being more liberally interpreted, the use of inexpensive receiving sets in that vicinity became practicable. Consequently the interest in this form of amusement developed rapidly not only in the homes but even in the places of business of some of the larger firms, who installed sets for public entertainment.

SPORTS

Hunting is the most usual sport in the Kingdom; practically every important center has a club and maintains a game preserve in which hare, pheasants, and a small number of deer are to be found.

There are approximately 236 soccer football clubs in the National Football Union, with a total membership of about 13,000 players. In addition to this there are approximately 100 clubs which are not affiliated with the Union and which comprise about 5,000 players.

Tennis is played in the larger cities, but the number of courts probably does not exceed 200 in the entire country.

Boxing and wrestling are also indulged in to a small extent. There are no golf links in the country.

Horse racing has received a certain amount of attention and is very popular. Clubs which sponsor this form of sport are maintained at Belgrade (two clubs), Čakovec, Indjia, Ljubljana, Zagreb (three clubs), Maribor, Sarajevo, Sinj (two clubs), Subotica, and a number of the smaller cities.

Boating clubs exist at Belgrade, Zagreb, Ljubljana, Split, Novi Sad, and Osijek.

In Slovenia, winter sports, including skiing, are fairly well developed.

HEALTH RESORTS

Few regions in Europe offer more natural attractions for persons seeking picturesque scenery and an equable climate than does the Dalmatian coast. The larger towns like Split (Spalato) and Dubrovnik (Ragusa) possess fine examples of Renaissance architecture. The bay of Kotor (Cattaro), flanked by some of the highest peaks of the coast range rising from the water's edge, has all the majesty of a Norwegian fiord. In pre-war days the Austro-Hungarians, realizing the potentialities of this region as an attraction for tourists, developed a number of seaside resorts which became exceedingly popular among the travelers of central Europe. These resorts are still being maintained and are much frequented by Czechoslovaks, Austrians, and the inhabitants of this Kingdom. Good hotel accommodations exist at a number of them, especially at Orkvenica and Kraljevica, both near Fiume; at Split, where there are iodine baths; and at Dubrovnik. Nearly all of the islands of the coast have bathing stations and comfortable hotels.

In the interior of the country there are several important summer resorts, the most frequented being at Bled, in the mountains near the Slovenian-Austrian frontier, where a great many persons (including a large number of foreigners) spend the hot months. Other mountain resorts frequented by foreigners are the Plitvica Lakes, south of Zagreb, and Krapinske Toplice and Rogaška Slatina, both north of Zagreb. Medicinal springs exist in unusual number throughout the entire country. Many of these are being developed and administered by the Government, while others receive a State subsidy. As their merits are not generally known beyond the confines of the Kingdom, they draw their clients almost entirely from the local population and many of them only from the immediate locality.

NEWSPAPERS AND PERIODICALS

According to the best available information, there are 221 newspapers published in the Kingdom, most of them dailies. Of these, 11 are in the German language, seven in Hungarian, three in Czech or Slovak, two in Russian and one in Turkish. Three of these daily journals are important publications devoting their columns to economic and commercial subjects. In addition to the newspapers, there are about 306 publications which appear sporadically and which are the organs of industrial, trade, and social organizations; 79 periodicals which appear regularly, some of them featuring economic, banking, financial, commercial, and sporting news; and 26 illustrated publications appearing weekly or less frequently. This makes a grand total of 632 newspapers and recurrent publications. As a rule practically all of the journals publishing general news are the organs of one of the political parties, and the reading public of each is limited largely to the members of its own political organization. Independent newspapers representing neutral political opinion are rare. The Belgrade Economic Review (formerly the

Economic and Financial Review), published in both French and English, is easily the most important publication in the Kingdom for persons desiring to follow the economic and commercial development of the country. The following figures show the distribution of publications by regions and categories: Croatia-Slavonia, 193; Serbia-Montenegro, 168: Slovenia, 105; Bosnia-Herzogovina, 54; Dalmatia, 58; Voivodina, 54; total, 632.

GOVERNMENT AND ADMINISTRATION

CONSTITUTION

On June 28, 1921, the Constitution was voted and immediately became the basic law of the Kingdom. It was popularly known as the "Vidovdan Constitution" because its enactment took place on the anniversary of the great national holiday of that name. The official name of the Kingdom is given as the "Kingdom of the Serbs, Croats, and Slovenes," no mention being made of "Yugoslavia."

The constitution very closely follows the lines of the former Serbian constitution, with such modifications as were necessary to meet the conditions resulting from the incorporation of new territory. The principal opposition to the instrument came from the political element favoring a Federal State, as against the highly centralized form of Government provided by the Constitution. Unlike most modern constitutions, which are usually limited to a declaration of the broad, basic principles of government, the constitution of the new State is a lengthy document of rather detailed legislation, which continually refers to laws that shall be enacted in order to carry out its own provisions. It contains about 15,000 words.

The subject matter of the constitution is indicated by the following titles:

I. General provisions.
II. Basic rights and duties of citizens.
III. Social and economic provisions.
IV. State authorities.
V. The King.
VI. Regency.
VII. National Skupshtina (Parliament).
VIII. Administrative authority.
IX. Judicial authority.
X. State economy.
XI. The army.
XII. Changes of the constitution.
XIII. Transfer of authority.
XIV. Concluding ordinances.

Part III, which deals with the social and economic provisions, prescribes the voting of laws for the protection and insurance of workmen, to whom it guarantees the right to organize for the purpose of improving their economic conditions. It also provides for the carrying out of an agrarian reform whereby large estates will be expropriated and their areas divided into small tracts which will be distributed among those who will actually till the soil, preference being given to the needy veterans of recent wars.

The bill of rights not only guarantees to the people the usual rights of private individuals such as personal liberty, inviolability of the home, and liberty of the press, but defines these rights in detail.

The Constitution prescribes that all the legislative enactments of the National legislative Skupshtina (Parliament) shall be in accordance with the constitution, but to no tribunal or court is given the authority to decide the constitutionality of any enactment and the

Skupshtina itself is the sole judge of the constitutionality of its laws. Amendments of the Constitution may be proposed either by the Crown or by the Skupshtina, and they are passed by the Parliament in the same manner as a law with the single exception that the amendments require an affirmative vote of three-fifths of the total membership of the National Assembly. Every proposed amendment must expressly specify all the points of the Constitution which are to be modified or supplemented.

The constitutional provisions regarding the Crown, Parliament, and administrative units are to be found in the sections dealing with these subjects.

THE CROWN

Under the Constitution the King has a broad power of appointment and removal of State officials; he has the power to declare war and conclude peace, but the declaration of war, in the event that the State is not attacked or that war has not been declared upon it, must be previously approved by the Skupshtina. He has the power of pardon and amnesty for all political and military criminals. He may convoke and dissolve the Skupshtina, but in the latter case the decree of dissolution must contain a call for new elections within three months, and for the reassembling of the Skupshtina within four months. He has the power to introduce bills through the Council of Ministers or through individual ministers, as well as the authority to promulgate ordinances and regulations for the execution of laws, provided such ordinances and regulations are countersigned by the competent minister. He possesses no veto power.

Should the King be absent from the country or incapacitated by illness, he is represented during this period by the heir apparent. Should the heir apparent not have attained his majority (18 years of age) the Crown is represented by the Council of Ministers, whose authority during the period of their regency does not include the right of dissolving the Skupshtina.

COUNCIL OF STATE

The Council of State is the supreme administrative body of the Kingdom and consists of 24 members. Twelve of these members are selected by the Council of Ministers from a list of 24 candidates nominated by the Skupshtina, and 12 members are chosen by the Skupshtina from a list of 24 candidates presented by the Council of Ministers. The 24 persons thus selected are then appointed by the King and hold office during their lifetime, or until they attain 70 years, the age of retirement. They can not be removed from office and are free from political pressure. Any subject of the Kingdom who has reached 35 years of age and who has served the State for 10 years is eligible for appointment. The president and vice president of the council are appointed by the King upon the nomination of the Prime Minister. This body makes the draft of legislative bills in accordance with the instructions of the Ministerial Council, formulates opinions on questions placed before it by the Government, and studies all legislative measures, either proposed by the Skupshtina or by the Government to the Skupshtina; and although its opinions thereon are not binding they must be presented to the Skupshtina before the bill can become subject to debate.

It functions as a Court of Discipline for State officials and serves as a tribunal before which election appeals are heard. It hears and decides appeals against ministerial decisions, and these decrees are binding. It also prepares the list of candidates for vacant seats in the Courts of Cassation and of Appeal and for vacancies in the Court of Accounts which has supreme supervision over all State accounts. In general this body exercises supervisory authority over all local autonomous units; as an administrative organ it heads the State administration and decides all acts of an administrative nature within the limits of the law.

COURT OF ACCOUNTS

The Court of Accounts, which is really known as the "General Control," is a special governmental institution for the control and supervision of Government accounts. It comprises a president and four members appointed by the King upon the nomination of the Skupshtina from a list of candidates presented by the Council of State. This body examines, corrects, and approves the accounts of all State institutions and sees to it that expenditures are in accordance with the budget. All estimates of Government expenditures presented to the Skupshtina must be accompanied by the commentaries of this court. Ministerial responsibility for expenditures ceases only with the approval of such outlays by the Court of Accounts.

MINISTERIAL COUNCIL

The Ministerial Council, which is composed of all of the ministers and presided over by the Prime Minister, is in charge of the executive branch of the Government. This council determines and carries out the internal and foreign policy of the Government. This ministerial body also constitutes the advisory cabinet of the Prime Minister and is responsible for all its acts to the Crown, from whom the individual members receive their appointment. The tenure of office of the council depends upon the support of Parliament. A minister may be without portfolio or be designated as the administrative head of a ministry.

There are actually 17 ministries, each under the direction of a Minister who is responsible for the administration, as follows: Foreign Affairs; Unification of Laws; Interior; Public Works; Public Instruction; Justice; Communications; Posts and Telegraphs; War and Marine; Finance; Commerce and Industry; Agriculture and Waters; Mines and Forests: Agrarian Reform: Cults; Public Health: and Social Politics.

"SKUPSHTINA," OR NATIONAL LEGISLATIVE ASSEMBLY

MEMBERSHIP AND ORGANIZATION

The legislative branch of the National Government is known as the Skupshtina and is composed of a single chamber. Its members, who are called deputies, are elected for a term of four years and are eligible to reelection. The number of deputies which may be elected from any one of the 33 prefectures ("oblasti"), into which the Kingdom is divided, varies with the population, one deputy being elected for each 40,000 inhabitants or fraction thereof exceeding 25,000. At the present time there are 315 deputies.

For electoral purposes the prefectures are divided into districts ("srez"), each prefecture usually containing from six to nine districts. A deputy may be elected from any district in the Kingdom, irrespective of his place of residence. To be eligible for election the candidate must be a subject of the Kingdom in the full enjoyment of all civil rights and have attained 30 years of age. In the case of a naturalized subject, he must have maintained a domicile within the country for at least 10 years, dating from naturalization. All candidates must be able to speak one of the national languages, Serbo-Croatian or Slovenian. Specifically excluded as candidates are Government contractors and officials in the police, finance, forest, and agrarian-reform services. The president of the Skupshtina is elected by the deputies from their own number. He is responsible for the maintenance of order in the Skupshtina, and no armed force may enter the premises without his consent. Deputies, except for serious offenses, enjoy immunity from arrest.

ELECTION OF DEPUTIES

The election for the Skupshtina must be by secret ballot, and the electors must be subjects of the Kingdom in the full enjoyment of their civil rights, have attained the age of 21, and have registered as voters six months prior to the election. At present, the right to vote is limited to male subjects, the Constitution stipulating that the question of woman suffrage be determined by subsequent law.

The system of representation within the prefectures and districts and the mode of determining which of the candidates are elected is based upon the d'Hondt system, the chief features of which are minority representation and the distinction made between the district candidate and prefectural candidate at large. Each candidate, with the exception of the candidate at large, has an alternate whose name also appears on the electoral sheet. In the event of the retirement of the deputy, his vacant seat in the Skupshtina is automatically filled by the alternate.

SESSION OF THE SKUPSHTINA

According to the Constitution, the Skupshtina convenes every year on October 20, but it may be convened in extraordinary session at the will of the King. The King may dissolve Parliament as a royal prerogative or upon the recommendation of the president of the Skupshtina whenever the latter considers such action to be the will of the majority of the legislative body.

THE PROCESS OF LAW-MAKING

In order that a bill become a law it must be approved by the appropriate committee of the Skupshtina, receive a majority vote of the Skupshtina itself, and be signed by the King. The law enters into force 15 days after its publication in the Official Journal, unless a different date is specified in the law itself. One-third of the deputies constitute a quorum.

POLITICAL PARTIES

The Radicals, Croatian Peasant Party, and Democrats constitute the principal political elements in the Skupshtina. As a result of the 1925 elections, their representation was 142, 64, and 57, respectively, of a total membership of 315.

PROVINCIAL AND MUNICIPAL GOVERNMENT

At the time of the formation of the Kingdom in 1919, the administrative units were Serbia, South Serbia (Macedonia), the Voivodina, Croatia-Slavonia, Slovenia, Dalmatia, Bosnia-Herzegovina, and Montenegro. Under the terms of the Constitution these historical territorial divisions have been effaced and replaced by 33 small administrative units known as "oblasti," and prefectural districts. These "oblasti" can not have a population or excess of 800,000 inhabitants but there is no stipulation as to their minimum population or as to their minimum and maximum areas. The size of the districts is determined mainly by administrative reasons and by the existing means of communication. The administrative head of a district is the "veliki zupan," or prefect, who is appointed by the King upon the nomination of the Ministry of the Interior to which he is subordinate. He has no judicial powers, but with the exception of the collection of national taxes he exercises full civil and police authority over the district.

His lieutenant is the "pod zupan" whose functions are to inspect, under the instructions of the "veliki zupan," the various district officers and to replace his superior during the absence of the latter. Each district has its council made up of representatives of each "srez," or county, in the "oblast." This council has no positive function, being only consultative and advisory.

Each "oblast" is divided into a number of "srez", or counties, the size and population of which are determined by political and administrative reasons, irrespective of population and area. The chief administrative officer is the "srezki nacelnik", or subprefect, who exercises the same administrative functions over the "srez" as the "veliki zupan" exercises over the "oblast." The "srezki nacelnik," like the "veliki zupan" to whom he is subordinate, receives his appointment from the King upon the nomination of the Ministry of the Interior.

The smallest administrative unit is the "opshtina," or municipality, the chief administrative officer of which is a mayor elected by the inhabitants of the town. His election must be approved, as a matter of form, by the Council of State. His administrative functions are, on a small scale, similar to those of the "veliki zupan," but, in addition to these duties, he is the chief officer of the municipal court and keeps the military records of the inhabitants for the purpose of the draft. The budgets of the municipality are subject to the supervision of the Ministry of Finance, without whose approval no loans can be contracted. In the event that a municipal loan is guaranteed by the Ministry of Finance the authorization of the Skupshtina is necessary.

Novi Sad, Vršac, Subotica, and Sombor, all in the Voivodina, are free cities which had obtained their status under the old Hungarian régime, and their privileges have been recognized by the Government of the new Kingdom. They have their own town senates which have real legislative functions. In all financial matters these cities are autonomous, and their budgets are not subject to the approval of the Ministry of Finance. In the matter of civil administration they are directly under the authority of the Ministry of Interior in exactly the same way as the prefects or "veliki zupans." Each of these free cities is governed by a mayor elected by the people.

JUDICIAL SYSTEM

At the time of the formation of the Kingdom, the courts of those Provinces which formerly belonged to the Austro-Hungarian Empire continued to regulate all judicial matters in their respective jurisdictions, while the courts of Serbia and Montenegro continued their functions as in pre-war days. As the court systems in the various former Austro-Hungarian Provinces differ among themselves and from those of Serbia and Montenegro, the Ministry of Unification of Laws immediately proceeded to elaborate a plan for the establishment of one judicial system for the entire country, which upon completion would be submitted to the Skupshtina for enactment into law. Although this plan has progressed fairly well, it is not complete, and the judicial system has not yet been unified.

In general, the Kingdom is divided into six judicial districts, as follows: Serbia and Montenegro; Dalmatia; Slovenia; Croatia-Slavonia; Voivodina; and Bosnia-Herzegovina. The courts in each district are divided in the following manner: The "srezki" or county court, which is a court of first instance; the district or "okruzni" court, which is a court of second instance; the court of appeal and the court of cassation or supreme court, which is the capstone of the judicial system of each district. At Zagreb, two courts of cassation hold their hearings, one having jurisdiction over Croatia-Slavonia and the other over Slovenia and Dalmatia. The remaining courts of cassation are at Belgrade, Novi Sad, Sarajevo, and Podgorica. In Serbia and Montenegro no "srezki" courts exist.

The courts cited above have full jurisdiction over all civil and criminal cases and, except for the city and county of Belgrade, have jurisdiction over all commercial litigation. In Belgrade, however, there is a commercial court, with the rank of a court of first instance, to which all matters regulated by the commercial code are submitted. Appeals from the decisions of this commercial court may be made to the court of appeal, and then to the supreme court. The Serbian law provides for trial by jury only in criminal cases involving theft, arson, and the destruction of property where the injured party has incurred personal danger. All other matters are tried without jury, the decision being reached by a majority vote of the presiding judge and associate judges.

The project of the law for the unification of the judicial system provides for courts of first instance, courts of second instance, courts of appeal, and one court of cassation, which, under the provisions of the Constitution, must have its seat at Zagreb.

DIPLOMATIC AND CONSULAR SERVICES

The diplomatic and consular services of the Kingdom are administered by the Ministry of Foreign Affairs. The diplomatic branch maintains legations at Washington, Paris, London, Brussels, Athens, Rome, Berlin, Vienna, Budapest, Sofia, Bucharest, Tirana (Albania), Prague, Madrid, the Hague, Warsaw, and Berne. At Constantinople and at the Vatican, Rome, there are delegations in charge of the diplomatic interests of the Kingdom.

Consulates general have been established at New York, Chicago, Berlin, Munich, Buenos Aires, Vienna, Helsingfors, Paris, Marseille,

Saloniki, Cairo, Budapest, Milan, Bucharest, Prague, and Constantinople.

Consulates are maintained at Pittsburgh, Cleveland, San Francisco, and Denver, in the United States; at Corfu, Greece; Gratz and Klagenfurt, Austria; Pecuj, Hungary; Korca and Scutari, Albania; Varna, Bulgaria; Trieste, Bari, and Florence, Italy; and Smyrna, Turkey. All of the above-mentioned consulates general and consulates are in charge of "career" officers.

There are a number of honorary consuls general and consuls serving in the large cities where career officers are not maintained.

In addition to these diplomatic and consular offices the Kingdom has opened abroad a number of privileged commercial agencies whose functions are to further the trade interests of the country and to develop foreign markets for Yugoslav products. Such agencies have been opened in the following places: United States, New York (132 West 43rd Street) and San Francisco (offices in the National Bank); Albania, Scutari, with a branch at Durazzo; Germany, Berlin, Munich, Leipzig, Hamburg; Austria, Vienna; Belgium, Antwerp; France, Paris, Marseille, Lyon; Great Britain, London, Manchester; Greece, Athens, Saloniki; Poland, Warsaw; Czechoslovakia, Prague; Switzerland, Geneva; Argentina, Buenos Aires and Rosario; Brazil, Rio de Janeiro; Peru, Lima.

The countries maintaining legations at Belgrade are the United States, Great Britain, France, Spain, Italy, Belgium, Germany, Austria, Hungary, Czechoslovakia, Switzerland, Albania, Poland, Greece, Bulgaria, and Rumania.

The ministers of Persia, Portugal, Japan, and Sweden at Bucharest, Rumania, and the minister of the Netherlands at Athens, Greece, are also accredited to the court at Belgrade. The Vatican is represented by a papal nuncio.

EDUCATIONAL SYSTEM

The diverse political and religious influence to which the several regions have been subjected naturally resulted in the development of different school systems in the various Provinces of the Kingdom. In order to overcome this and to develop the national consciousness, the school administration has been placed under the sole control and direction of the Ministry of Education. Local inspectors and local boards of education exist, but these have only supervisory functions. The law for the unification of the entire school system has been elaborated, but it has not yet received parliamentary sanction. The ministry, in the meantime, carries out its plans through ministerial decrees which, however, can not exceed the authority conferred by the laws of the various Provinces. To the ministry is left the determination of the curricula in all the primary and secondary schools, as well as the selection of the textbooks to be used, which are uniform throughout the country.

The school system in its general outline corresponds to that found in most European countries. As in the United States, the time usually required to finish the regular university course (not including postgraduate work) is 16 years. But instead of the eight-year primary course, the four-year secondary course, and the four-year university course prevailing in the United States, primary grades comprise four years and the secondary grades eight years. The

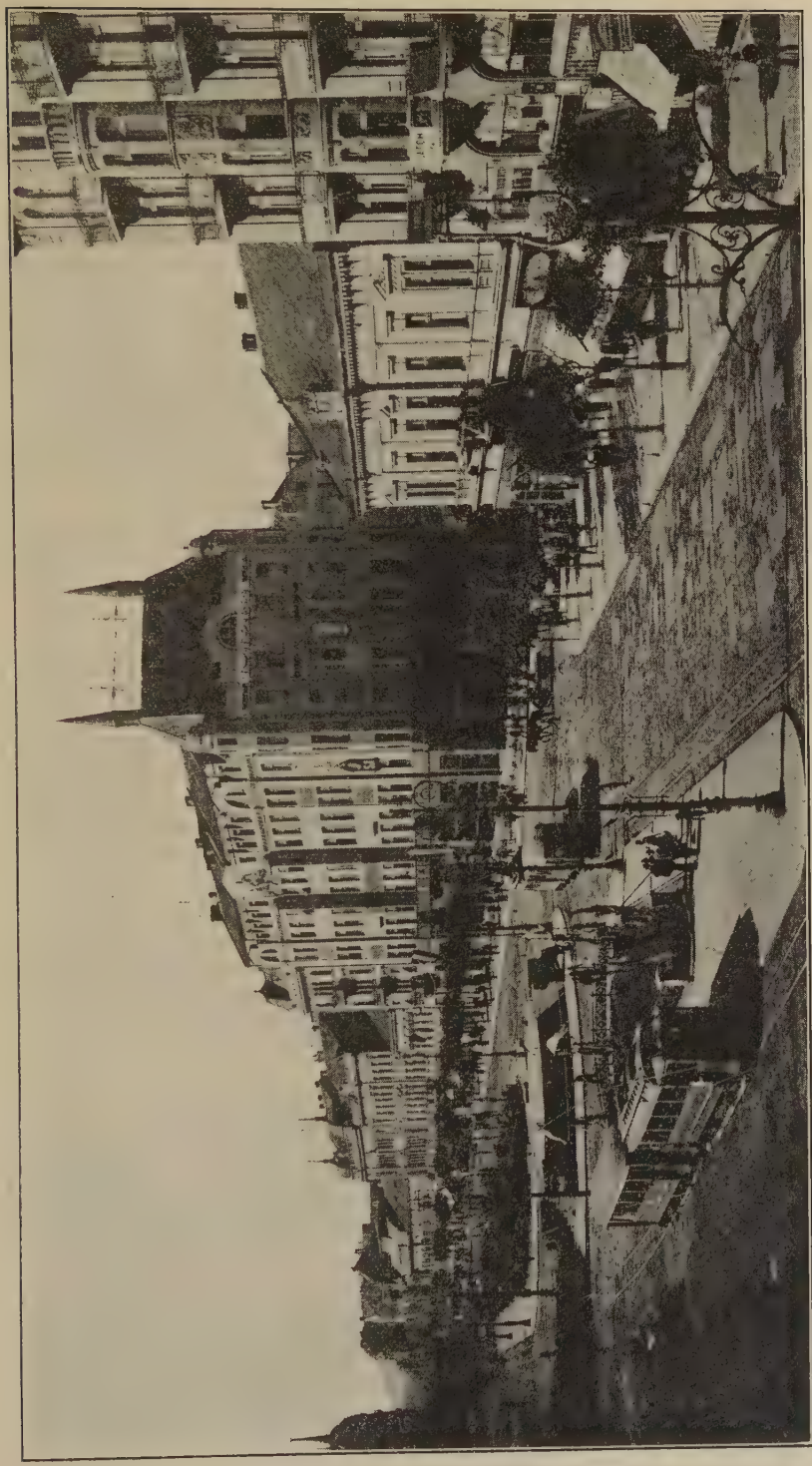


FIG. 4.—Terazija Square, Belgrade

secondary course is, however, divided into two periods of four years, each of which is more or less independent of the other.

Coeducation does not prevail in the country. Even in the primary grades, most of the schools are divided into boys' schools and girls' schools. Mixed classes occur, however, in the smaller schools of the country districts. In general, men are employed as teachers in the boys' schools and women in the girls' schools.

TEACHING STAFF

The teachers in the schools throughout the Kingdom receive their appointment through the Ministry of Education according to the provisions of a law which requires certain qualifications on the part of the appointees. Teachers in the primary schools must be graduates of normal schools, and teachers of the secondary schools are required to have university diplomas. In the secondary schools, the prospective teacher must start with a period of apprenticeship.

In the case of primary schools the State pays the teachers' salaries, and the municipalities provide for all other expenses. The cost of other public schools is borne entirely by the State.

The 1926–27 budget provided 413,973,991 dinars for primary education, 98,788,108 dinars for secondary education, and 69,105,793 dinars for higher education, but these sums do not include the supplements of increased salaries which are paid from a lump appropriation for all State employees.

According to the census of 1921, 48.5 per cent of the population of school age or over could read or write. The percentage of literacy varied greatly in the several provinces—for example, Slovenia, 86 per cent; Voivodina, 77.8 per cent; Croatia-Slavonia, 67 per cent; Dalmatia, 50.5 per cent; Serbia, 34 per cent; Bosnia-Herzegovina, 20.6 per cent; South Serbia (Macedonia), 16 per cent; and Montenegro, 33 per cent. The percentages are now considerably higher. The sudden expansion of the school population taxed greatly the capacity of the schools.

PRIMARY SCHOOLS

The primary school is here the beginning school for all classes of students, and attendance is compulsory. Compulsory education ends with the completion of this four-year course. A two-year course has, however, been added to some of the primary schools.

Upon successfully completing the primary courses, the pupil is admitted to the secondary school.

Many pupils are diverted from the secondary school at the end of the first period of four years, for this period prepares not only for the second four years of that school but also for the high school for girls, the commercial school, the nautical school, and the normal school. The second part of the secondary school course prepares for the university, the technical high school, the high school for commerce and trade, and the school for veterinaries.

HIGHER EDUCATION

Higher education is supplied by the Royal Technical High School at Zagreb, the Royal Veterinary High School at Zagreb, the Royal High School for Commerce and Trade at Zagreb, and five universities, as follows: University of Belgrade, with faculties of law, medicine, philosophy, orthodox theology, technics, and agriculture; University of Zagreb (Croatia), with six faculties, law, medicine,

philosophy, Roman Catholic theology, agriculture, and course in pharmacy; University of Ljubljana (Slovenia), with faculties of law, medicine, philosophy, technics, and Roman Catholic theology; University of Subotica (Voivodina), with only a faculty of law; University of Skoplje (South Serbia), with only a faculty of philosophy. These last two are connected with the Belgrade University.

INDUSTRIAL SCHOOLS

In addition to the general educational program there are vocational institutions such as industrial schools, mining schools, and agricultural schools, which are placed under the administration of the competent ministries but which are likewise supervised by the Ministry of Education. Special emphasis is being placed upon industrial education, as, since the war, the Government has realized the necessity of promoting industrial development and of gaining greater economic independence by replacing foreign industrial workers, foremen, and superintendents with natives. To this end, industrial education is being somewhat extended and schools that were already established are receiving greater encouragement. There are approximately 260 industrial schools in the Kingdom, a large majority of which are night schools. The number of pupils attending such schools totals about 35,000.

AGRICULTURAL SCHOOLS

As is natural in a country having about 85 per cent of its population engaged in agricultural pursuits, a number of agricultural schools have been opened throughout the Kingdom. These schools are under the direct administration of the Ministry of Agriculture, the period of instruction usually covering two years.

Higher agricultural education is furnished by the agricultural department of the Belgrade University and by the agricultural and forestry department of the University of Zagreb. The former department was opened in 1920 and the latter in 1919. The presentation of a maturity certificate is required for entrance to these courses.

EDUCATIONAL STATISTICS

The latest educational statistics are for the session 1925–26 and are as follows:

Character of institutions	Number of schools (of faculties in the case of the universities)	Number of teachers or professors [1]	Number of students
Primary schools	7,463	17,047	817,529
Secondary schools:			
Gymnasiums	187	2,434	84,000
Real gymnasiums	6		
Girls' high schools	15	420	[3] 7,500
Commercial schools	91	([2])	([2])
Nautical schools	3	25	162
Normal schools	207	1,609	27,183
High technical schools	1	67	([2])
Veterinary school	1	27	([2])
Commercial high school (export academy)	1	30	([2])
High pedagogical school	2	([2])	([2])
Universities:			
Belgrade	5	[3] 140	[3] 8,000
Skoplje	1	13	141
Subotica	1	12	299
Zagreb	6	97	2,671
Ljubljana	5	43	1,210

[1] Figures for the universities do not include lectors, docents, and assistants. [2] Not given. [3] Estimates.

PUBLIC HEALTH SERVICE

At the end of the World War, it was found, in Serbia and South Serbia, that there was a dearth of physicians and a lack of medicaments and that practically all the hospitals had been destroyed. In the former Austro-Hungarian Provinces, the public-health service was entirely disorganized by the withdrawal of the officials of the former Dual Monarchy. In order to correct these conditions and to weld the various health and sanitary organs into a uniform system, the Ministry of Public Health was formed and charged with the direction of all matters relating to public health and sanitation. This ministry immediately appointed public-health inspectors in each Province, supplied physicians to each district, organized and installed as rapidly as possible sanitary and hygienic institutions, and set the existing hospitals in order.

It divided the public-health service into two branches—the hygienic service and the sanitary service.

HYGIENIC SERVICE

The hygienic service supervises and directs the hospitals, the institutions of social medicine, and the epidemiological and bacteriological stations and is also charged with the development of physical culture and with the supervision of the work of its medical staff.

SOCIAL MEDICINE

This branch of the hygienic service is engaged in the study of the problems of social medicine. The collection, study, and dissemination of medical statistical data are among its principal functions. Two central institutions of social medicine, one at Zagreb and the other at Belgrade, were organized to direct this work, which at the present time is being carried on by 100 institutions working under the supervision and direction of these two central organs.

The statistical service is improving, with the result that each year more cases are brought to the attention of the authorities. A larger number of reported cases is therefore not necessarily indicative of more disease.

HOSPITALS

At the close of 1925 the hospitals in the Kingdom were approximately as follows:

Provinces	Hospitals	Beds	Provinces	Hospitals	Beds
Serbia and South Serbia	58	4,326	Montenegro	6	340
Croatia-Slavonia	25	5,266	Bosnia-Herzegovina	35	2,065
Voivodina	33	2,160			
Slovenia	38	5,738	Total	205	20,821
Dalmatia	10	926			

EPIDEMIOLOGICAL AND BACTERIOLOGICAL SECTION

A former assistant Minister of Public Health, in a pamphlet on infectious diseases in Serbia in 1912, stated that 48 per cent of the deaths in Serbia were caused by epidemics. This shows that the need of an efficient organization to eradicate infectious and contagious

diseases is very acute in the Kingdom. Since the unification of the Kingdom, the Ministry of Public Health has been very active in organizing epidemiological and bacteriological institutes and stations throughout the country, and the result of these efforts is now becoming apparent in the health statistics.

In the first place, a central institute for the study and suppression of diseases has been organized in Belgrade. Provincial epidemiological institutes exist in Sarajevo, Niš (Nish), Novi Sad, Osijek, and Zagreb, and one is now being organized in Cetinje. There are 22 bacteriological stations scattered throughout the country—all branches of the provincial institutes—engaged in the study of local conditions and in the instruction of the inhabitants in the methods of combatting the prevalent diseases. The suppression of malaria, tuberculosis, trachoma, and social diseases, as well as the question of the protection and rearing of offspring, receives the close attention of the Government.

SANITARY SERVICE

The sanitary service has not advanced to the same extent as the hygienic branch, owing to the fact that no previous organization for this sort of work existed. The Ministry of Public Health has, however, attacked the problem with considerable energy and is endeavoring to organize the sanitation of 20 to 30 villages every year. In such villages proper water supplies and drainage will be provided and an effort made to instruct the population in the ordinary precepts of sanitation.

UNION OF HEALTH COOPERATIVES

Founded on private initiative but working in close conjunction with and under the supervision of the Ministry of Public Health is the Union of Health Cooperatives.

This organization resulted from a complete survey, in 1921, of the rural health situation, which indicated that the only real solution lay in the establishment of rural health centers which would supply proper medical attention, medicines, and such articles as would be necessary to maintain a relatively high sanitary standard in the homes.

A number of such centers were formed on a cooperative basis. Each health cooperative in the union is an independent unit which endeavors in every possible way to improve the health and increase the well-being of the community.

More than 5,000 persons were enlisted in this work at the close of March, 1925.

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NATIONAL CURRENCY AND FINANCE

MONETARY SYSTEM

The monetary system is decimal, the unit being the dinar, which at par of exchange is equal to 19.3 American cents or to 1 franc (French or Swiss), 1 Greek drachma, 1 Spanish peseta, or 1 Italian lira. The dinar is divided into 100 paras.

The metallic currency comprises the following coins of pre-war issue:

Items	Gold		Silver			
	20-dinar ("Napoleon")	10-dinar	5-dinar	2-dinar	1-dinar	50-para
Fineness	900	900	900	835	5	835
Weight—grams	6.45161	3.22580	25	10	833	2.50
Diameter—millimeters	21	19	37	27	23	18
Variations—						
In fineness—per cent	1	1	2	3	3	3
In weight—do	2	2	3	5	5	7
Total value of issue—dinars	5,000,000	5,000,000	2,000,000	19,400,000	30,800,000	9,400,000

Nickel coins of an alloy of 75 per cent copper and 25 per cent nickel were minted on the basis of the law of January 1, 1883, as follows:

20, 10, and 5 para coins were minted in 1883 and 1884 for	dinars	1,200,000
5-para coins were minted in 1904 for	do	400,000
20, 10, and 5 para coins were minted in 1912 for	do	2,000,000
Total	do	3,600,000

Government institutions and private individuals were not required to accept nickel coins for a sum larger than 5 dinars at a time. This nickel money has not been withdrawn from circulation.

Bronze coins were minted in 1904 on the basis of the law of February 26, 1904, in 2-para pieces for the sum of 250,000 dinars. Government institutions and private individuals were not required to accept bronze coins for a sum larger than 3 dinars at a time. This money has not been withdrawn from circulation.

The paper notes in circulation, both in pre-war times and to-day, are of 1,000-dinar, 100-dinar, 10-dinar, and 5-dinar denominations.

Since 1918—with the exception of South Serbia, where the "Napoleons" (20-dinar gold pieces) continue to circulate to some extent—paper money has been almost exclusively used.

At the time of unification of the former Austro-Hungarian Provinces of Slovenia, Dalmatia, Croatia-Slavonia, Bosnia-Herzegovina, and Voivodina with Serbia and Montenegro to form the present Kingdom, the Austro-Hungarian crowns (kronen) were in general circulation in those parts of the Kingdom which were previously integral parts of the Dual Monarchy. At the close of 1919,

in order to have a unified currency for the entire Kingdom, the Government withdrew the crown notes from circulation, redeeming them at the rate of 1 dinar for 4 crowns, the actual rate at that time. To replace the notes thus withdrawn and provide a medium of exchange which would be equally acceptable to the population of both Serbia and the former Austro-Hungarian Provinces, dinar-crown notes were issued bearing on the face a statement of both the crown value and the dinar value. At the same time 20-dinar (80-crown) notes were put in circulation, but these were recalled after a very short time, and no notes of this denomination are now outstanding.

As there has been only one issue of dinar-crown notes and as these are gradually being withdrawn, a unified dinar currency is looked for in the near future.

In order to meet the needs for fractional currency caused by the noncirculation of the silver 2-dinar, 1-dinar, and ½-dinar pieces, small notes were issued in 1919 in 1-dinar, 50-para, and 25-para denominations.

In July, 1922, the fractional currency was increased by the minting of the following nickel coins:

Items	5 para	10 para	25 para
Diameter, millimeter	18.8	20.85	24
Thickness, do	1.3	1.2	1.4
Amount of issue, dinars	191,250	10,976,500	12,043,284

However, the depreciation of the dinar was so great that these small denominations were of little service. By 1924 the 1-dinar and the 50 and 25 para notes had so deteriorated that it was determined to replace them by 2-dinar, 1-dinar, and 50-para coins, of an alloy of 75 per cent copper and 25 per cent nickel. The specifications of these new coins are as follows:

Items	2 dinar	1 dinar	50 para
Weight, grams	10	5	2.5
Diameter, millimeters	18	23	27
Total value of issue, dinars	100,000,000	75,000,000	25,000,000

These new coins began to make their appearance in September, 1925. The withdrawal of all paper notes of 1-dinar or less is expected soon.

With the exception of the fractional currency, no metallic medium of exchange is in general circulation.

Fiduciary circulation is treated in a separate section of this volume.

NATIONAL BANK

The Privileged National Bank of the Kingdom of Serbia, founded in 1883, became the National Bank of the Kingdom of the Serbs, Croats, and Slovenes in February, 1920, by virtue of a contract between the State and the bank. At the time of the ratification of the Constitution on June 28, 1921, the status of the National Bank

was regulated by a law which also confirmed the provisions of the contract. The purpose of the National Bank is to provide for the economic needs of the country by granting short-term credits, by regulating the fiduciary circulation, and by endeavoring in every possible way to protect and stabilize the national currency. It also performs the banking operations of the State and has the exclusive right to issue bank notes.

The National Bank of the Kingdom of the Serbs, Croats, and Slovenes is a joint-stock company under special State supervision, having its head office at Belgrade and branches and agencies at the following places; Banja Luka, Varaždin, Veliki Bečkerek, Vršac, Zagreb, Zemun, Ljubljana, Maribor, Mostar, Niš (Nish), Novi Sad, Osijek, Pančevo, Sarajevo, Skoplje, Split, Subotica, and Cetinje. The bank is authorized to open branches and agencies, but these must be registered with the competent court. The National Bank is the privileged bank of the Kingdom, and the duration of the concession is fixed at 25 years from February 1, 1920. This period may be prolonged if such action is recommended by the Royal Government and if such a prolongation receives the approval of the shareholders at a meeting to be held at least four years prior to the expiration of the concession.

CAPITAL

The capital of the bank is fixed at 50,000,000 gold dinars, divided into 100,000 shares at 500 gold dinars each; of these the 20,000 paid up shares issued by its predecessor, the Privileged National Bank of the Kingdom of Serbia, form an integral part. One-half of the remaining 80,000 shares were immediately offered for subscription at a price of 720 gold dinars a share, in accordance with the provision of the law stipulating that the rate of issue be fixed on the basis of the net assets of the bank. On December 31, 1925, the paid-up capital of the National Bank totaled 28,229,100 gold dinars. The second series of 40,000 shares may be offered for subscription when required, but the price of issue must not be less than 720 gold dinars. New shares are issued in the name of the subscriber, and the transfer of ownership may be effected only by the authorization of the board of directors. They may not be issued in the name of a foreigner, nor may a foreigner own them. The bank is held responsible for its liabilities to the extent of its actual property, but shareholders only in proportion to the amount of their subscribed stock.

RESERVE FUND

The National Bank has a reserve fund which is designed to cover eventual loss in the capital of the bank. The sum of 5 per cent of the net profits shall always be retained for the reserve fund until it equals 20 per cent of the paid-up capital.

The governor, members of the council of administration and of the supervising committee, and the functionaries of the bank divide among themselves 6 per cent of the net profits. After the deduction of these two percentages, 60 per cent of the remainder constitutes the share of the State in the profits of the bank, and 40 per cent is divided among the shareholders.

MANAGEMENT OF NATIONAL BANK

The management of the National Bank is in the hands of a board of directors, presided over by a governor, who must be a resident of Belgrade. The board of directors is composed of 24 members, elected for a period of four years by the assembly of shareholders. All of them must be subjects of the Kingdom, and at least 12 of them must be domiciled at Belgrade. For purposes of control, there is a supervisory committee composed of nine members, elected for three years by the general assembly of the bank.

GOVERNMENT SUPERVISION

The Government's supervision of the work of the National Bank is exercised by a special commissioner appointed by royal decree upon the nomination of the Minister of Commerce and Industry. He attends all meetings of the general board of directors in an advisory capacity and all the regular examinations of the safes and books of the bank; verifies the quantity of banknotes entering the safes and the quantity of banknotes placed in circulation, sees that they are well covered by securities which are readily convertible as provided for by law; and represents the Government at the assemblies of the shareholders.

Whenever, in his judgment, a decision of the board of directors or the assembly of shareholders is contrary to the existing laws or statutes or contrary to the public interest,the commissioner is authorized to suspend the execution of such decisions, pending the approval of the Minister of Commerce and Industry, to whom he must submit a report of the case. The Minister of Commerce and Industry is required to give his decision within 15 days from the receipt of this report. If no decision is made during that period, the suspended decision may be carried into effect. In order to supervise the transactions between the National Bank and the Ministry of Finance, the Minister of Finance is authorized to appoint a representative, who shall be attached to the office of the Government commissioner. In line with his duties this representative is entitled to request information bearing on all transactions between the National Bank and the Ministry of Finance, and to examine the foreign credits and deposits of the bank, as well as to secure any other information which the Minister of Finance requires about the operations in commercial paper.

FUNCTIONS OF NATIONAL BANK

The functions of the National Bank include the discounting and rediscounting of commerical drafts, of public warehouse warrants of the country, of the bonds of the State Treasury, and of coupons of State obligations on conditions to be determined by the statute; the purchase and sale of drafts and checks on foreign markets; the purchase and sale of gold and silver; and the granting of loans on gold and silver, State obligations, shares and letters of credit guaranteed by the State, letters of credit and communal bonds issued by domestic credit establishments and enterprises, on specified conditions; the issuance of short-term money orders on the basis of sums deposited in coined gold or in bank notes destined to serve as payment for customs taxes and other duties or taxes of the State; the acceptance of deposits and the management of money and other values; the

opening of current accounts and the issuance of credit money orders and checks on the basis of such accounts; the collection of debts and payments; the conduct of regular banking operations on a commission basis; the service of floating loans for the account of the State and of independent autonomous corporations, as well as of industrial and commercial enterprises of the country; and the granting of loans on the security of obligations of the cooperative agricultural unions, and rediscounting the drafts of the Cooperative Union of Workmen.

The National Bank is also called upon to collect sound currencies from subjects of the Kingdom who have emigrated, and to endeavor to make the country's monetary circulation profit thereby.

Aside from these operations, the National Bank also serves, without charge, as cashier of the State, under provisions which are determined in agreement with the Government.

The National Bank is not allowed to perform any banking transactions other than those enumerated above. It can not purchase or mortgage real estate, except that it is authorized to purchase as much real estate as is needed for its own use. In case a credit is endangered, the bank may secure a mortgage on the property of the debtor and, eventually, may purchase it but such property must be sold in the shortest possible time.

BANK OF ISSUE

The National Bank has the exclusive right to issue bank notes. The board of directors, together with the Minister of Commerce and Industry and the Minister of Finance, stipulate the type of bank notes to be issued and the manner in which their manufacture shall be controlled.

The National Bank is obliged to redeem all of its bank notes in legal metal coin upon presentation. Each note must bear on its face a printed engagement to this effect. The bank notes in circulation must be covered by a metallic reserve in gold and silver and in other readily convertible commercial and financial values. The reserve is composed of gold, silver, and foreign bank notes in its treasuries, as well as of the National Bank's credits abroad. The extent to which these latter may be included in the reserve is determined from time to time by agreements between the Minister of Commerce and Industry, the Minister of Finance, and the National Bank. Under no circumstances may the issue of notes exceed three times the amount of the bank's metallic reserve.

No existing law regulates what proportion of the entire metal reserve shall be silver or gold, and this proportion varies, for the reason that the principal item consists of credits abroad, which are constantly fluctuating as a result of the activities of the bank. The gold and silver reserve, on the other hand, varies only slightly, as neither gold nor silver is sold or received by the bank to any appreciable extent. The gold reserve represents gold coins at a value of 19.3 cents per dinar, and the silver reserve represents silver coins of an equal value if redeemable in gold. The reserve constituted by foreign bank notes and credits abroad represents foreign exchange at the pre-war rate (in round figures); thus, 1 dinar equals 1 French franc, 5 dinars equal 1 dollar, 25 dinars equal £1 sterling, etc., but only those currencies having a higher exchange rate than the dinar are taken into consideration. Inasmuch as the various currencies

constituting this large portion of the reserve are depreciated, this sum, while representing a value greater than that shown in paper dinars in the balance sheets, constitutes a smaller unit value than items in gold and silver.

SUSPENSION OF SPECIE PAYMENTS

By the law establishing the National Bank of the Kingdom of the Serbs, Croats, and Slovenes, the exchange of the bank notes of the National Bank for metal currency was suspended until the general economic and financial circumstances of the country and the state of the guaranty reserve of the bank should permit the resumption of specie payments.

PROVISIONAL EXCHANGE ACCOUNT

The State may, at any time and according to its needs, effect temporary exchanges at the National Bank and withdraw bank notes therefrom against securities of its gold or its credits abroad, free of charge, at the nominal rate of their value, to a maximum of 600,000,000 dinars. These bank notes are not included in the regular contingent of the National Bank. During the entire period of the suspension of specie payments, the State must maintain its securities of gold and foreign credits at a total of at least 300,000,000 dinars.

GENERAL PROVISIONS

The National Bank is not permitted to give credit information to private persons regarding the standing or credits and accounts which other private persons have with the bank.

Lost or destroyed bank notes can not be replaced by others, and those bank notes which are partially destroyed are only proportionately redeemed.

The property and income of the National Bank are exempt from the payment of all taxes and imposts during the period of its concession.

The use of the words "National Bank" either alone or in combination with other words, except by this bank itself, is prohibited.

No interest is paid on deposits.

The following is a comparative statement of the balance sheets of the National Bank, as of December 31, for the years 1921, 1924, and 1925:

[000 omitted]

Items	1921	1924	1925
ASSETS	*Dinars*	*Dinars*	*Dinars*
Metallic cover:			
Gold	74, 189	72, 358	75, 942
Silver	16, 733	17, 458	17, 486
Foreign bank notes	2, 432	4, 630	1, 071
At call in foreign countries	307, 999	379, 905	365, 634
	401, 353	474, 351	460, 133
Cash in nickel and other small coins	6, 889	740	321
Advances on securities	597, 943	1, 494, 994	1, 371, 191
Advances to State:			
Conversion of crown notes	1, 267, 089	1, 186, 368	1, 152, 923
On account of provisional exchange	334, 273	367, 963	347, 306
Credit for working capital	816, 851	966, 355	966, 355
Extraordinary credit	2, 000, 000	2, 000, 000	2, 000, 000
State domains as cover for issue of bank notes	2, 138, 377	2, 138, 377	2, 138, 377
Gain on exchange		595, 451	728, 674
Sundries	11, 763	68, 617	100, 512
Total assets	7, 574, 538	9, 293, 216	9, 265, 792

[000 omitted]

Items	1921	1924	1925
LIABILITIES	*Dinars*	*Dinars*	*Dinars*
Capital: 50,000,000 gold dinars, of which paid up	13,084	25,466	28,229
Legal reserve	1,837	5,833	7,282
Bank notes in circulation	4,688,444	6,001,504	6,062,684
State credits: Account for provisional exchange	334,273	367,963	347,306
Sundry obligations	371,377	629,578	504,652
Agio for purchase of gold for capital and funds	13,159	63,468	75,406
Accounts of State domains	2,138,377	2,138,377	2,138,377
Sundry accounts	13,987	61,027	101,856
Total liabilities	7,574,538	9,293,216	9,265,792

The receipts, expenditures, and distribution of net profit of the National Bank for the years 1921, 1924, and 1925 were as follows:

[000 omitted]

Items	1921	1924	1925
	Dinars	*Dinars*	*Dinars*
Gross receipts	25,191	97,486	100,957
Expenditures	8,683	39,015	37,802
Net profit	16,508	58,471	63,155
Distributed as follows:			
5 per cent for reserve fund	825	(1)	(1)
6 per cent for governor, etc	991	3,508	3,789
Of the remainder—			
60 per cent to State treasury	8,815	32,978	35,620
40 per cent to shareholders	5,877	21,985	23,746
Total	16,508	58,471	63,155

[1] The reserve fund exceeded the legal requirements, and no share of the net profit was set aside for this purpose.

The National Bank, in addition to the notes issued on its own account, has been obliged to assume, without interest, the responsibility for the bank notes issued by the Ministry of Finance for the conversion of the Austro-Hungarian crown bank notes found in the territory of the Kingdom of the Serbs, Croats, and Slovenes at the time of its unification.

DISCOUNT RATES AND INTEREST

The normal discount rate of the National Bank has remained at 6 per cent from 1921 to date. Up to June 23, 1922, the discount rate for industrial enterprises and credit institutions was only 5 per cent, but on that date it was increased to 6 per cent. The interest rate for loans on securities was 5 per cent for industrial enterprises and credit institutions and 6 per cent for all others, until September 14, 1921, when a uniform rate of 6 per cent for all creditors was established. On June 15, 1922, this was increased to 7 per cent, and on October 31, 1924, to 8 per cent, the present rate.

FIDUCIARY CIRCULATION

The National Bank alone has the right to issue bank notes. On December 31, 1925, the number of bank notes totaled 7,153,814,600 dinars, of which bank notes to the value of 1,084,626,675 dinars

were unissued and others to the value of 6,503,995 dinars had been withdrawn because of deterioration, leaving a total of 6,062,683,930 dinars in circulation.

According to the law of the National Bank, only gold and silver bullion, foreign bank notes in possession of the National Bank, and credits held abroad by the correspondents of the National Bank can serve as the metallic cover for the bank notes issued for the account of the National Bank. Only foreign currencies having an exchange value higher than the dinar are taken into consideration, and such currencies are calculated for the purpose of the reserve at their pre-war rate (1 dinar = 1 French franc, or 19.3 cents, etc.). The National Bank is authorized to issue bank notes to three times the amount of its metallic cover, which on December 31, 1925, totaled 460,131,820 dinars (2,428,084,833 paper dinars), including the reserve taken over from the Privileged National Bank of the Kingdom of Serbia, which reserve guaranteed the latter's issue of bank notes likewise taken over by its successor. This liability, which amounted to 1,275,991,289 dinars at the time of the redemption of the crown notes, had been reduced to 1,152,923,315 dinars by December 31, 1925. Mortgages on State domains to the extent of 2,138,377,163 dinars serve as a guaranty for this indebtedness.

Further, under the provisions of the law of the National Bank the State was authorized to obtain from the National Bank an extraordinary credit of 2,000,000,000 dinars, and also a credit of 1,000,000,000 dinars for working capital at an annual discount rate of 1 per cent. By December 31, 1921, the Ministry of Finance had drawn the entire amount of the 2,000,000,000 dinars credit and 816,851,379 dinars of the credit for working capital. Advances to the State on account of the second item totaled 966,355,034 dinars by December 31, 1925. These two credits are covered only by Treasury bonds. The credit for working capital must be liquidated at the end of each year.

The law provides that the 2,000,000,000 dinars credit must be liquidated by December 9, 1930, and that the reimbursement of the debt for the conversion of crown notes is to be paid from the State's share in the profit of the National Bank; from the net proceeds of the State domains; from extraordinary endowments, as provided in the budget; and by regular annual payments of 1 per cent of the debt beginning with 1927, and 2 per cent from 1930.

The exploitation of the State domains, which serve as a guaranty to the National Bank, is effected either directly by the State or through leases.

The National Bank is authorized to issue notes to cover all of these advances to the State, and its fiduciary circulation therefore includes notes issued on this account, as well as against its metallic reserve and on account of the redemption of crown notes.

The Minister of Finance, in his address to Parliament, on January 30, 1924, stated:

> The reason for the increase in circulation in 1923 should be sought in the fact that the State has withdrawn its deposits of the 8 per cent loan of 1922 (Blair's loan), and the 7 per cent loan of 1921 fron the National Bank. It is well known that the dollars were changed into dinars faster than necessary. These dinars had remained in the National Bank, and in the course of 1923 they were gradually withdrawn and spent in accordance with the Blair loan act. The decrease on this account amounts to 328,000,000 dinars. The deposit of the 7 per cent loan has decreased by 45,000,000 dinars. Both these sums have to a large extent entered

into the circulation and increased it. A second reason should be sought in the increase of gold and other reserves of foreign currencies at the National Bank.

The bank notes in circulation, together with the metallic reserve of the National Bank on specified dates, are shown in the following table:

Date	Bank notes in circulation	Metallic reserve	Date	Bank notes in circulation	Metallic reserve
	Dinars	*Dinars*		*Dinars*	*Dinars*
Dec. 31, 1918	340, 569, 310	297, 293, 917	Dec. 31, 1922	5, 039, 883, 135	343, 300, 456
June 30, 1919	494, 875, 065	327, 202, 287	June 30, 1923	5, 560, 821, 825	473, 603, 727
Dec. 31, 1919	664, 007, 459	434, 478, 619	Dec. 31, 1923	5, 790, 240, 920	437, 347, 023
Sept. 30, 1920 [1]	2, 814, 319, 175	437, 228, 236	June 30, 1924	5, 433, 951, 900	436, 279, 080
Dec. 31, 1920	3, 344, 127, 710	431, 362, 479	Dec. 31, 1924	6, 001, 503, 765	474, 351, 472
June 30, 1921	3, 745, 943, 390	437, 336, 343	June 30, 1925	5, 644, 080, 210	461, 716, 492
Dec. 31, 1921	4, 688, 443, 680	401, 353, 036	Dec. 31, 1925	6, 062, 683, 930	460, 131, 815
June 30, 1922	4, 808, 649, 085	357, 855, 982			

[1] The National Bank has no such records for June 30, 1920, and the Sept. 30, 1920, figures have been substituted.

The per capita fiduciary circulation on December 31, 1925, was slightly less than 500 dinars.

In view of the prevailing practice of making all payments by the transfer of actual money rather than by checks, and as the national budget totals about 12,000,000,000 dinars for receipts as well as for expenditures, and as the foreign-trade turnover amounted to more than 17,000,000,000 dinars in 1925, the number of bank notes in circulation is not considered excessive.

As shown in the table below, the metallic cover of the National Bank on December 31, 1925, was 460,131,815 dinars, or 7.59 per cent of the bank note issue, but, if the items in the currency reserve are valued in paper dinars at the exchange rate of December 31, 1925, the cover totals 2,428,084,833 dinars, or 40.05 per cent:

Items	Bank holdings	Exhibited in balance sheet, supposedly as paper dinars	Rate	Actual value in paper dinars
	Dinars	*Dinars*		*Dinars*
Gold coins	75, 941, 499	75, 941, 499		
Silver coins	17, 486, 280	17, 486, 280		
	93, 427, 779	93, 427, 779	10. 89	1, 018, 242, 285
Foreign currencies unspecified, held by National Bank or its branches	1, 070, 536	1, 070, 536		1, 070, 537
Foreign money and deposits held by representatives of National Bank abroad:				
Swiss francs	102, 682	102, 682	[1] 1,094.00	1, 123, 345
American dollars	8, 433, 237	42, 166, 186	56. 47	475, 224, 905
English pounds	1, 116, 458	28, 180, 472	274. 75	306, 747, 078
Dutch florins	58, 748	117, 496	23. 60	1, 386, 464
Austrian schillings	161, 761	161, 761	7. 98	1, 290, 858
Belgian francs	50, 421	50, 421	[1] 257. 00	129, 582
Italian lire	6, 363, 217	6, 363, 217	[1] 288. 50	1, 453, 995
Czechoslovak crowns	1, 111, 855	1, 111, 855	[1] 167. 75	1, 865, 138
French francs	287, 097, 004	287, 097, 004	[1] 215. 70	619, 268, 240
Foreign currency not specified	282, 406	282, 406		282, 406
Total		460, 131, 815		2, 428, 084, 833

[1] Per hundred units.

The declared policy of the National Bank, which alone has authority to issue bank notes, is not to increase the fiduciary circulation. This

stand is staunchly supported by the Ministry of Finance, which has publicly announced its opposition to any inflation. Despite an active campaign during October, 1923, in favor of increasing the fiduciary circulation, the National Bank steadfastly maintained its policy of noninflation, and there is every reason to believe that no additional bank notes will be placed in circulation.

EXCHANGE

The course of dinar exchange since the opening of the Belgrade Bourse in February, 1919, has been marked by wide, and at times violent, fluctuations. While the Government has achieved a stabilized currency, it is interesting to note the developments which preceded this period of stabilization. The causes of these fluctuations divide themselves into four distinct periods and are sketched briefly below.

FROM FEBRUARY, 1919, TO JUNE 30, 1921

The par exchange of the dinar is: 5.18 dinars equal $1; 1 dinar equals 1 French franc, and 25.22½ dinars equal £1 sterling. The Belgrade Bourse opened in February, 1919, with dollars selling for 7 dinars and 100 French francs for 126 dinars. The first quotations for the pound sterling were in April, the rate being 38 dinars. Except for a violent fall of dinar exchange in March, 1920, followed by a rapid rise culminating about July 1, 1920, there was a steady depreciation in the exchange value of the dinar from the opening rates in 1919 to June 30, 1921. This decline of dinar exchange was due primarily to an increase of fiduciary circulation from about 350,000,000 dinars on December 31, 1918, to about 3,750,000,000 dinars on June 30, 1921. This inflation was brought about in the first place by the absorption of the Austro-Hungarian crowns (to the value of 1,200,000,000 dinars) which were found in the territory of the Kingdom at the time of unification, and in the second place by advances made to the State by the National Bank during 1920 to the amount of 1,709,784,000 dinars. The adverse trade balance and the failure of Government receipts to meet the budget expenditures were also contributing factors.

After a steady decline since February, 1919, dinar exchange broke sharply in March, 1920, when dollars brought 57.50 dinars, 100 French francs 417 dinars, and £1 sterling 210 dinars. This decline was attributed to heavy speculation on the bourse. From this low point the dinar immediately recovered, and by April 1, 1920, dollars were selling for 42 dinars, 100 French francs for 310 dinars, and £1 sterling for 170 dinars.

This improvement continued, with the prospects of a large harvest, until July 1, 1920, when dollars were selling for 15 dinars, 100 French francs for 130 dinars, and £1 sterling for 62 dinars. The failure of the crop to come up to expectations, combined with large orders for foreign merchandise, resulted, however, in a heavy demand for foreign exchange, which could not be met from export returns, and the dinar again resumed its downward trend.

FROM JULY 1, 1921, TO NOVEMBER, 1921

On July 1, 1921, dollars were selling for 35 dinars, 100 French francs for 350 dinars, and £1 sterling for 135 dinars. During this period

there was a very rapid decline in dinar exchange, due to heavy inflation, the fiduciary circulation during this period increasing from 3,745,943,390 to 4,700,000,000 dinars, as a result of further advances by the National Bank to the Government, amounting to about 1,250,000,000 dinars. The failure of the Government to balance its national budget and a heavy adverse trade balance accentuated the fall in exchange.

FROM NOVEMBER, 1921, TO DECEMBER, 1922

This period was characterized by rapid and violent fluctuations of dinar exchange, owing to the efforts of the Ministry of Finance to control the exchange rates artificially. Ministerial decrees regulating the sale and purchase of foreign exchange and foreign currency followed one another at short intervals, and prohibition of exportation and control of importation were invoked to strengthen the dinar. These measures only increased the adverse trade balance, and the Government in September, 1922, prohibited all exchange transactions except those by the National Bank and on the bourse, thus effecting an artificial rate of exchange, which rapidly strengthened until the dollar brought only 60 dinars, 100 French francs 420 dinars, and £1 sterling 225 dinars. The result of this was that clandestine exchange transactions at rates approximating 15 or 20 points higher for the dollar were fostered and little or no foreign exchange or currency found its way to the bourse. It became necessary, therefore, for the Government to supply the needs of the bourse from the proceeds of a foreign loan. This costly procedure proved unavailing, and by December, 1922, the dinar exchange again slumped. With the change of the Government a new Minister of Finance came into power at this time.

SINCE DECEMBER, 1922

The new Minister of Finance immediately removed the artificial control of exchange, retaining only those measures which were necessary to eradicate speculation. Thereupon the dinar rapidly fell to its lowest level, which was reached in February with dollars selling for as high as 120 dinars, 100 French francs for 700 dinars, and £1 sterling for 500 dinars. This rapid decline did not shake the faith of the new Minister of Finance, and he continued his policy. Since February, 1923, the dinar has steadily and progressively increased its value, under the stimulating influence of a free market and of a sound import and export policy, resulting in a favorable trade balance in 1924. The budget was likewise balanced during this period.

In December, 1925, dollars were selling for 56 dinars, 100 French francs for 215 dinars, and £1 sterling for 275 dinars.

During the second half of 1925 dinar exchange was so buoyant that the real problem was to prevent such a rapid rise as would result in restricted exports. The policy of the Government during this time was defined as favoring stabilization of the exchange at about 56 dinars to the dollar, until the export season was well advanced, after which further rises of the dinar would be permitted, followed by further periods of stabilization. A stable exchange was maintained throughout 1926, the average being 56 dinars to the dollar, with slight fluctuations from time to time.

THE BUDGET[8]

From the formation of the Kingdom of the Serbs, Croats, and Slovenes on December 1, 1918, until June 1, 1919, the Government's expenditures were paid almost entirely from advances made by the great powers which were allied or associated with it during the World War. In these early months of the Government's existence it was obliged to have recourse to such advances to meet current disbursements because the tax-collecting agencies were not properly functioning. Furthermore, it was impossible to estimate the expenditures or receipts during this formative period.

The first budget estimates for the new Kingdom were for the year beginning June 1, 1919, and were submitted to the legislative branch of the Government on May 23, 1919. From June 1, 1919, to August 1, 1922, the only available figures concerning Government receipts and expenditures are those furnished by the budget estimates.

The estimates for the 1919-20 budget, in which some of the items were carried in dinars and some in crowns, were as follows: Expenditures, 1,293,186,434 dinars and 1,060,150,779 crowns; receipts, 416,827,998 dinars and 1,190,000,737 crowns.

As the dinar was approximately equal to 2 crowns at the time these estimates were prepared, the amounts expressed in dinars were as follows: Expenditures, 1,823,262,822 dinars; receipts, 1,011,828,366 dinars; estimated deficit, 811,434,456 dinars. The second budget period ran from June 1, 1920, to June 1, 1921, the estimates being as follows: Expenditures, 3,994,356,543 dinars; receipts, 3,884,177,798 dinars; estimated deficit, 110,178,745 dinars.

On June 28, 1921, the temporary financial law extended the 1921 budget for the seven months beginning July 1, 1921. The estimates for these seven months totaled: Expenditures, 2,330,041,317 dinars; receipts, 2,265,770,382 dinars; estimated deficit, 64,270,935 dinars.

From January 1, 1922, to July 31, 1922, the Government functioned by means of budget twelfths, the monthly estimates for which were 371,487,451 dinars for both receipts and expenditures, the total for the seven months being 2,600,412,157 dinars.

During the period from June 1, 1919, to July 31, 1922, the estimates were neither very complete nor accurate, owing to the inability of the Government to forecast adequately the disbursements which it would be required to make or the receipts which it would be able to secure from the various sources of State revenue. Several factors contributed to this uncertainty as regards both income and disbursements. Among these the most important were the steady depreciation of the dinar, the lack of sound information concerning the expenditures which would necessarily fall upon the Government, the diverse systems of taxation found in the various Provinces of the Kingdom, and the disorganization of the tax-collecting agencies.

It is believed that the actual disbursements greatly exceeded the estimates for expenditures during these three years, but no definite figures on this subject have been issued by the Ministry of Finance.

Beginning with August 1, 1922, Government finances entered into a more stable era, and since that date the Ministry of Finance has published a balance sheet showing actual receipts and disbursements for the various budget periods. These statements have evidenced each year a surplus of receipts over expenditures. The following

[8] For the purposes of the budget, Government agencies report their gross receipts and gross expenditures.

table shows the receipts and disbursements of the Government for the budget periods indicated:

Period	Actual receipts	Actual expenditures	Surplus
	Dinars	*Dinars*	*Dinars*
August 1, 1922, to June 30, 1923	6, 484, 017, 403	6, 125, 131, 888	358, 885, 515
July 1, 1923, to March 31, 1924	7, 413, 811, 526	6, 375, 970, 191	1, 037, 841, 335
April 1, 1924, to March 31, 1925	11, 190, 055, 178	10, 579, 388, 339	610, 666, 839
April 1, 1925, to March 31, 1926	11, 925, 843, 641	11, 208, 333, 975	717, 509, 666

Under the terms of the financial law, surpluses over and above those provided for in budget estimates may be used by productive ministries, such as the Ministry of Communications, etc., for the purchase of needed equipment and other necessary capital expenditures. By a special act of Parliament the expenditure of 800,000,000 dinars for needed military equipment was authorized, but no provision was made for the cover of this expenditure. The Minister of Finance, as need arises, may use the budget surplus for this purpose. Only a part of this surplus, said to be less than one-half of the 800,000,000 dinars, has been used up to the present time for military purposes. Among other uses to which this surplus was put were: Construction of railways, repair of rolling stock, State subsidies to various hospitals, etc., investments and purchases for the Ministry of Mines and Forests, especially for State mines.

As the budget estimates for the fiscal years beginning April 1, 1925, were not ready in time, budget twelfths became necessary and were voted by the Parliament in periods of four months each. The budget for the year ending March 31, 1927, was voted on March 30, 1926, and provided a balanced budget for receipts and expenditures, both totaling 12,504,000,000 dinars.

The Government balance sheet for 1925–26 is shown in the table below:

GOVERNMENT BALANCE SHEET, 1925–26

RECEIPTS

Items	Actual	Estimated in budget
GENERAL RECEIPTS	*Dinars*	*Dinars*
Customs duties	1, 786, 064, 080	1, 689, 000, 000
Consumption taxes	1, 730, 219, 944	1, 402, 000, 000
Transportation tax	229, 161, 352	160, 000, 000
Monopolies	2, 498, 530, 089	2, 336, 050, 000
Gain on exchange	1, 232, 004	12, 000, 000
Tax on business turnover	253, 348, 834	200, 000, 000
Receipts of the Ministry of Communications	2, 307, 036, 164	2, 088, 690, 000
Postal Savings Bank and branches	28, 881, 652	9, 742, 000
Invalids tax	171, 190, 183	100, 300, 000
Extraordinary surtaxes (500 per cent and 30 per cent)	512, 879, 323	500, 000, 000
State domains of "Belje" and "Topolovac"	68, 752, 161	176, 342, 400
Sundry receipts (agrarian)	16, 847, 926	21, 040, 000
Military transportation surtax	52, 677, 182	50, 150, 000
Nonservice tax	864, 103	100, 000
Profits on the making of money (in accordance with article 286 of the financial law)	140, 000, 000	
SPECIAL RECEIPTS		
Direct tax and surtaxes	1, 019, 977, 386	619, 202, 157
Post, telegraph, telephone, etc	437, 618, 628	423, 053, 400
State Mortgage Bank, National Bank, State Lottery, State Printing Office, etc	109, 213, 418	144, 315, 975
State properties (forests, mines, quarries, health resorts, and State buildings)	428, 725, 375	516, 348, 354
Capital and funds (interest on tax arrears, agio, etc.)	22, 139, 420	7, 024, 706
Miscellaneous small receipts	110, 484, 418	53, 091, 008
Total receipts	11, 925, 843, 642	10, 508, 450, 000

GOVERNMENT BALANCE SHEET, 1925–26—Continued

DISBURSEMENTS

Items	Actual	Estimated in budget
	Dinars	*Dinars*
Council of State	1, 660, 494, 567	1, 945, 486, 273
Ministry of Justice	200, 196, 718	230, 554, 792
Ministry of Education	538, 858, 087	582, 386, 440
Ministry of Cults	83, 855, 872	108, 628, 233
Ministry of Interior	542, 594, 524	569, 824, 085
Ministry of Public Health	255, 076, 875	294, 634, 809
Ministry of Foreign Affairs	127, 879, 583	214, 461, 444
Ministry of Finances	1, 437, 077, 555	1, 607, 781, 809
Ministry of War and Marine	2, 127, 620, 492	2, 313, 709, 366
Ministry of Public Works	269, 619, 269	494, 713, 914
Ministry of Communications	2, 419, 569, 620	2, 218, 550, 351
Ministry of Posts and Telegraph	289, 673, 332	379, 897, 472
Ministry of Agriculture and Waters	174, 210, 986	273, 657, 144
Ministry of Mines and Forests	319, 178, 177	336, 947, 983
Ministry of Commerce and Industry	57, 720, 687	92, 219, 528
Ministry of Social Politics	342, 958, 738	469, 245, 649
Ministry of Agrarian Reform	34, 455, 860	57, 295, 951
Ministry for the Unification of Laws	357, 597	370, 978
Reserve credits	110, 890, 359	131, 000, 000
Various obligations	42, 698, 401	
Temporary disbursements in accordance with article 131 of the law of public accounting	145, 873, 007	
Disbursements out of additional and extraordinary credits	22, 172, 693	
Paid in accordance with article 239 of the financial law for 1924–25	5, 300, 976	
	11, 208, 333. 975	12, 321, 366, 221
Excess of receipts over expenditures (period: April, 1925, to April, 1926)	717, 509, 667	
Total	11, 925, 843, 642	12, 321, 366, 221

SOURCES OF GOVERNMENT REVENUE

Of the budget receipts, direct taxes yield about 14 per cent, indirect taxes about 30 per cent, and the income from productive enterprises about 56 per cent.

DIRECT TAXES

The Constitution stipulates that the taxes are to be assessed progressively in accordance with the paying capacity of the population and that taxation shall be equal throughout the Kingdom. Despite this latter provision the direct tax system is not uniform throughout the country, as the Serbian laws are still in force in what was formerly the Kingdom of Serbia and Austro-Hungarian laws still apply to those Provinces that were formerly part of the Dual Monarchy. The tax systems in these latter Provinces not only differ from the Serbian system but also differ among themselves as a result of the divergent policies applied to each Province by the Austro-Hungarian Government during the period of its control.

The law for direct taxes in Serbia was passed in 1884, and that of Montenegro, in 1903, but, as the latter law was modeled on the Serbian law, the tax systems in the two countries are practically identical. The tax laws in the various former Austro-Hungarian Provinces were promulgated on the following dates: Bosnia-Herzegovina, 1893; Slovenia and Dalmatia, 1896; Croatia-Slavonia and the Voivodina, 1909 for object taxes, 1915 for personal taxes, and 1917 for property taxes. In order to arrive at a definite classification of the direct taxes found in the various Provinces, it is necessary to eliminate a number of miscellaneous direct taxes which can not be properly accounted for in any system of direct taxation and which are of such minor importance as not to form any serious portion of the revenue. As typical of the taxes so eliminated may

be cited the poll tax of 6 dinars in Serbia, the tax on livestock, olives, bees, wine, and spirits in Montenegro, and the tax on hunting and transportation in Croatia-Slavonia and in the Voivodina. The important direct taxes may, in general, be divided into five categories, as follows: (1) Land tax; (2) tax on buildings; (3) tax on personal earnings; (4) tax on income derived from invested capital; (5) tax on business.

These taxes are all found in various forms in each of the Provinces, and, for the purpose of simplification, are here divided into four regions: (1) Serbia and Montenegro (Serbian system); (2) Bosnia-Herzegovina (special system applicable to this Province); (3) Slovenia and Dalmatia (Austrian system); (4) Croatia-Slavonia and the Voivodina (Hungarian system).

LAND TAX

The land tax is levied either on the assesed value of the land, on the assessed income from the land or on both. These assessments were established by surveys made at the time of the entry into force of the several laws in the various Provinces and have not been modified for Serbia, but for the Austro-Hungarian Provinces where such assessments were entered in the tax registers in Austro-Hungarian crowns the original figures have been retained while the word "crowns" has been stricken out and replaced by "dinars."

The application of the land tax in the several Provinces is as follows:

Serbia and Montenegro.—In Serbia and Montenegro, land is divided into five classes, the first of which includes town or city lots, the rate being one-half of 1 per cent of the assessed value. All other land falls within the remaining four classes, the determining factor being the condition of the land itself. The hectare is the unit of taxation, and the tax amounts to 4 dinars, 3 dinars, 2 dinars, and 1 dinar per hectare, respectively, for classes 2 to 5. In addition, the State levies on all classes a surtax of 153.5 per cent of the base tax.

Bosnia-Herzegovina.—The land tax in Bosnia-Herzegovina is based on the gross returns from the land, as well as on the assessed value of the land. The tax rate on the assessed gross returns is 10 per cent plus a State surtax of 20 per cent of the base tax. The tax on the assessed value of the land is four-tenths of 1 per cent, which is increased by a State surtax amounting to 70 per cent of the base tax.

Slovenia and Dalmatia.—In these two Provinces, the basis of the tax is the net returns from the land, the rate being 20 per cent plus a surtax of 150 per cent of the base tax.

Croatia-Slavonia and the Voivodina.—In these Provinces, the land tax is based on the net cadastral returns, the rate being 20 per cent. The State surtax is 90 per cent of the base tax.

TAX ON BUILDINGS

The tax on buildings is based on the assessed gross rental of buildings in cities, of business premises in villages, and on the number of rooms. In the former Austro-Hungarian Provinces the assessed rentals were originally fixed in Austrian crowns, and these assessments

have been retained up to the present day, the only modification being the substitution of the word dinars for crowns.

Serbia and Montenegro.—The tax is based on the gross returns from the buildings and the rates are 8 per cent for cafes, 4 per cent for business premises, and 3 per cent for lodgings. There is a State surtax amounting to 153.5 per cent of the base tax.

Bosnia-Herzegovina.—In this Province, the building tax is based on the assessed gross income from buildings, as well as on their assessed value. The present rate is 4 per cent of the assessed gross income and four-tenths of 1 per cent of the assessed value of the buildings. In both cases there is a State surtax amounting to 70 per cent of the base tax.

Slovenia and Dalmatia.—Here the basis for such taxation is the assessed gross income, as well as the number of rooms. The tax on the former amounts to 12 per cent of the gross income, but the income from the buildings used for public utility such as hospitals, Government offices, and the like is assessed only 3 per cent. The minimum tax on the number of rooms is 1.125 dinars and the maximum 330 dinars. The State surtax in both cases amounts to 70 per cent of the base tax.

Croatia-Slavonia and the Voivodina.—The basis of the tax in villages is the number of rooms; elsewhere it is the assessed gross income from the buildings. The rate is 9 per cent, 11 per cent, or 14 per cent of the gross income, depending upon the population of the community. There is a State surtax amounting to 90 per cent of the base tax. The tax on the number of rooms is divided into 3 categories of 10 classes each. The lowest rate is 1.50 dinars and the maximum 150 dinars. Every room in excess of 15 pays an additional tax of 8, 10, or 12 dinars, depending upon the category. The State surtax amounts to 100 per cent of the base tax.

TAX ON PERSONAL EARNINGS

This tax is invariably assessed on the net income and is levied on income derived from salaries, wages, and fees from professional work. Government allowances for the high cost of living are not taxed, and Government salaries are exempt from the payment of all surtaxes.

Serbia and Montenegro.—In these two Provinces the tax is progressive, running from a minimum of 1 per cent to a maximum of 8 per cent in the case of mental work and from six-tenths to seven-tenths of 1 per cent for physical work. The State surtax amounts to 153.5 per cent of the base tax.

Bosnia-Herzegovina.—In this Province the net income from personal services is taxed four-tenths of 1 per cent, and there are surtaxes amounting to 320 per cent of the base tax.

Dalmatia and Slovenia.—There is no special tax on personal earnings in these Provinces, but there is a general income tax which will be discussed under a subsequent heading.

Croatia-Slavonia and the Voivodina.—In these Provinces this tax is exceedingly intricate but, in general, is as follows: Personal earnings resulting from farm wages or from wages as domestic servants are taxed progressively, the minimum annual tax being 1.20 dinars and the maximum tax 24 dinars. On salaries and all other forms of personal earnings, the tax starts at 0.50 dinar on annual incomes up to

50 dinars and increases progressively until it amounts to 150 dinars for an annual income of 3,000 dinars, after which there is an assessment of 5 dinars for each 50 dinars or fraction. The surtax, which applies only to incomes in excess of 750 dinars, amounts to 35 per cent of the base tax.

TAX ON INCOME FROM INVESTED CAPITAL

This tax is assessed on gross income which is entirely derived from interest on bank deposits, public and private, and from other forms of invested capital.

Serbia and Montenegro.—In these two Provinces the tax is assessed on the gross income, the base rates being 6 per cent, but on incomes of 2,500 dinars or more there is an additional tax of one-tenth of 1 per cent for every 100 dinars, until 6,400 dinars is reached, when a flat rate of 10 per cent is charged on incomes exceeding that figure.

Bosnia-Herzegovina.—This Province has no separate form of taxation on incomes from invested capital, but the tax on business includes income from such sources.

Slovenia and Dalmatia.—In these Provinces the basis for such taxation is the gross income of the previous year. The rate is progressive, ranging from 1.5 per cent to 10 per cent. The normal State surtax amounts to 170 per cent of the base tax but is diminished to 100 per cent if the tax is collected at the source.

Croatia-Slavonia and Voivodina.—Here the tax is assessed on the gross income, the rate being 2 per cent in the case of officers, widows and minors and 10 per cent for all other taxpayers. Surtaxes amount to 95 per cent of the base tax.

TAX ON BUSINESS

The tax on business is based on income derived from commercial or industrial enterprises where the returns from capital and labor are so intimately combined that they can not be separately taxed under categories 3 and 4.

Serbia and Montenegro.—The basis of this tax is the net income from industrial, commercial, or trade enterprises, as established by the autonomous tax communities. The rate is progressive, the minimum being 3½ per cent on incomes below 2,000 dinars and the maximum 7 per cent for incomes of 25,000 dinars or more. The State surtax is 153.5 per cent of the base tax.

Bosnia-Herzegovina.—The business tax is assessed on the net income from personal work and from capital. The minimum rate is 3 per cent, but there is a progressive surtax running from 100 per cent on incomes up to 2,500 dinars to 400 per cent on incomes in excess of 25,000 dinars, which makes the actual rates range from 6 to 15 per cent. There is a further surtax of 20 per cent of the 3 per cent tax.

Slovenia and Dalmatia.—In Slovenia and Dalmatia the business tax is a contingent tax which was originally instituted by the Austrian Ministry of Finance in order to bring the revenue from these Provinces to a definite, determined figure. The Ministry of Finance fixed this contingent, which was apportioned among the taxpayers of Dalmatia and Slovenia according to their ability to pay.

In the first instance, the tax assessed in each Province was apportioned among the various tax districts of the Province by the fiscal agents of the Ministry. In each district, a committee distributed

the tax among the taxpayers according to their paying capacity. Half of the members of such committees were elected by the taxpayers, and half were appointed by the Ministry of Finance. This system has been maintained integrally by the Serbo-Croat-Slovene Government. The actual contingent for Dalmatia is 600,000 dinars and for Slovenia 2,250,000 dinars. There is a surtax of 150 per cent assessed on the contingent in both Provinces.

Joint stock companies do not pay the contingent tax but are taxed separately. Mutual aid societies, cooperatives, or public charity organizations are exempt. The net income of joint stock companies, except insurance companies, is taxed 10 per cent, but such a tax can never be less than 1 per cent of the invested capital. In the case of insurance companies, the tax is 1 per cent of the net yearly premiums after the deduction of all bonuses. In all cases where the dividends exceed 10 per cent of the invested capital, the excess between 10 per cent and 15 per cent is taxed 12 per cent while the excess over 15 per cent is taxed 14 per cent. The surtax is 90 per cent of the total tax paid. There is an additional progressive surtax, which is based on the percentage obtained by dividing the net profits by the total capital invested. This surtax amounts to 30 per cent of the taxes paid on the net income, if the percentage is from 6 to 8, and increases to a maximum of 80 per cent for a percentage of 14 or more.

Croatia-Slavonia and the Voivodina.—The business tax in these Provinces is identical with the tax on personal earnings and is assessed on the net income from commercial and industrial enterprises. The tax is 10 per cent on the net income of 3,000 dinars, after which point there is an assessment of 5 dinars for each 50 dinars or fraction thereof. The surtax amounts to 70 per cent of the assessed tax on incomes up to 150 dinars, and to 95 per cent on incomes in excess of that sum.

Joint stock companies in these Provinces do not pay this business tax but are taxed separately on their net income as follows:

When the percentage of net income to invested capital is —	For industrial corporations	For other corporations
	Per cent	*Per cent*
Less than 10 per cent	10	12
From 10 to 15 per cent	12	14
From 15 to 20 per cent	14	16
From 20 to 25 per cent	16	18
Over 25 per cent	18	20

The surtax is 90 per cent of the total assessed tax. Mutual aid societies are exempt from this tax if their net income is less than 6 per cent, while cooperative societies pay only 6 per cent, provided their dividends do not exceed 5 per cent. In both cases, the regular tax is collectible if the income exceeds these stated limits.

MISCELLANEOUS DIRECT TAXES

In addition to the direct taxes described above, there exists a general income tax in Dalmatia and Slovenia and in Croatia-Slavonia and the Voivodina, special mining taxes in Bosnia-Herzegovina,

Croatia-Slavonia, and the Voivodina, and a general property tax in Croatia-Slavonia and the Voivodina. No previous mention has been made of these taxes, as they do not have counterparts in the other tax regions.

Income tax.—The income tax in the mentioned regions was originally applied in order to equalize the difference in the levying of direct taxes and as such is assessed on the entire income from all sources. Consequently, it represents an additional levy on incomes already taxed.

In Dalmatia and Slovenia the net income up to 1,200 dinars is not taxed but incomes exceeding this sum are not entitled to any exemption. The rate is progressive, beginning with 22.50 dinars for incomes up to 2,500 dinars and gradually increasing until the rate reaches 167.50 dinars per 2,500 dinars on incomes in excess of 52,500 dinars. The surtax is, likewise, progressive, ranging from 15 per cent on taxes assessed on incomes between 1,200 dinars and 1,300 dinars to 120 per cent on taxes assessed on incomes in excess of 50,000 dinars.

In Croatia-Slavonia and the Voivodina this tax is similar to that in Dalmatia and Slovenia, the minimum tax being 24.50 dinars on incomes between 1,200 and 1,300 dinars, after which there is a rate of 75 dinars for each 1,250 dinars or fraction thereof. The surtax, which is assessed on the base tax, is likewise progressive, increasing from 15 per cent on incomes of 1,200 dinars to 120 per cent on incomes of 50,000 dinars or more. This tax does not apply to joint stock companies.

Mining tax.—The mining tax in Bosnia-Herzegovina was introduced in 1881 and is assessed on the net income from the exploitation of mines. The tax rate and the surtax are identical with the business tax which has been previously described.

In Croatia-Slavonia and the Voivodina, the mining tax was introduced in 1875. The tax basis is the net income from the exploitation of mines. The rate is 7 per cent for coal mines and 5 per cent for other mines. The surtax is 95 per cent of the base tax. The State treasury receives 70 per cent of the collections from both the tax and the surtax, and the provincial treasuries receive 30 per cent.

General property tax.—In Croatia-Slavonia and the Voivodina, there is a general property tax levied on the assessed value of all property with the exception of clothing, books, and household furniture and furnishings. This tax is progressive, ranging from 0.5 per mille on property valued at 5,000 dinars or less to 0.6 per cent on property valued at 1,000,000 dinars or more. There is no surtax.

POSTWAR DIRECT-TAX MEASURES

Subsequent to the unification of the Kingdom of the Serbs, Croats, and Slovenes, the need of additional revenue induced the Government to increase taxes either by the imposition of new taxes or by the application of surtaxes. The new taxes instituted were the war-profits tax and the tax on the volume of business. The former was discontinued in 1921, but the latter still remains in force. The surtaxes imposed were the extraordinary surtax, the war-invalids tax, and the military transport tax.

Tax on volume of business.—This tax constitutes an exception to the general rule that direct taxes are not uniform throughout the

Kingdom. It is assessed on the gross volume of business of all industrial, commercial, and trade enterprises as well as on fees for professional service. The rate is 1 per cent.

Extraordinary surtax.—The direct taxes under the various categories described above bear more heavily on the industrial and commercial elements than on the agricultural population. In order to secure the additional revenue necessary to balance the budget, and pending the voting of a uniform direct tax law, a temporary extraordinary surtax was introduced in 1923.

The surtax is assessed on all the direct taxes and surtaxes, with the exception of the invalids tax, and amounts to 500 per cent of such taxes and surtaxes on land outside of the cities and towns and to 30 per cent of all other direct taxes and surtaxes.

One purpose of this measure was to make the agricultural element bear its proper share of the tax burden.

Tax for benefit of war invalids.—This tax is assessed in order to furnish revenue for the pensioning and rehabilitation of war invalids and is in the form of a progressive surtax levied on all direct taxes and surtaxes (with the exception of the extraordinary surtax) assessed in the Kingdom. The rate originally started at 10 per cent on assessments of 20 dinars and gradually increased to 20 per cent on assessments of 20,000 dinars or more, but the law of budget twelfths which was voted on March 31, 1925, doubled these rates.

As an exception, taxes collected on interest not exceeding 100 dinars are exempt from the war-invalids tax.

Military transport tax.—In order to supply the needs of the transport section of the Ministry of War, a new surtax was instituted by the law of budget twelfths enacted on March 31, 1925. This surtax is assessed and collected in exactly the same manner as the invalids tax, and its rates are identical with those of the invalids tax prior to the recent increase which has been noted above.

New project of direct taxes.—The problem of simplifying and unifying the direct-tax system has, for several years, engaged the attention of the Government, with the result that a project of law has been elaborated for submission to the Parliament. The great divergence of views between the agricultural class, on one side, and the commercial and industrial elements, on the other, makes it difficult to forecast the actual form in which the law will appear, and also tends to retard the enactment of such a measure.

INDIRECT TAXES

Indirect taxes, which are uniform throughout the Kingdom, may be classified as customs duties, consumption taxes, and "taxes and stamp taxes."

CUSTOMS DUTIES

Customs duties are charged on both imports and exports, the former supplying by far the major portion of the customs revenue. The receipts from both import and export duties amount to about 12.5 per cent of the Government income.

CONSUMPTION TAXES

Consumption taxes supply about 6.5 per cent of the budget receipts and are levied on the following articles of general consumption: Beet and fruit sugar; coffee; chicory; rice; beer; wines (from 15

to 22.5 per cent of alcohol and all foreign); essences (perfumes); liquors, cognac, rum, candles; electric lamps; illuminating gas; carbide (calcium carbonate); mechanical lighting devices; alcohol; brandy; essence of vinegar; gasoline.

TAXES AND STAMP TAXES

This designation covers a number of diversified items, such as the inheritance tax [9]; road, bridge, and ferry tolls; rents from the leasing of transportation rights to private concerns; tax on railway, steamer and tramway tickets and on freight shipments; fines; fees for the registration of firms, including partnerships and joint stock companies; licenses, fees for official services; passport fees, and many similar charges.

"Taxes and stamp taxes" yield about 11 per cent of the Government revenue.

TAX SERVICE

Taxes with the exception of customs duties are collected by a special tax service which is under the sole direction and control of the Ministry of Finance. There is a head bureau in the principal city of each of the tax regions (Belgrade, Zagreb, Ljubljana, and Sarajevo), which directs the activities of the district ("oblast") tax offices. Customs duties are collected by the customs service, which is also under the direction and control of the Ministry of Finance. In each customhouse, however, there is stationed an agent of the tax service who collects the consumption tax on imported articles.

RECEIPTS FROM PRODUCTIVE STATE ENTERPRISES

The principal sources of income from "productive State enterprises" are the State monopolies, the State Railways, State domains, postal, telegraph, and telephone services, maritime service, and the participation of the Government in the profits of the National Bank, the State Mortgage Bank, the postal savings and postal cheque service, and the State Lottery. The State monopolies furnish about 21 per cent of the total Government revenue, State railways about 24 per cent, State domains about 5 per cent, and all other productive enterprises about 6 per cent.

The State Railways, the maritime service, and the postal, telegraph, and telephone services are dealt with in the section on "Transportation and communications," while the National Bank has already been treated at length. The other important productive enterprises of the Government are described below.

AUTONOMOUS MONOPOLY ADMINISTRATION

The Autonomous Monopoly Administration, which is a Government institution, is a heritage from the former Kingdom of Serbia. The tobacco monopoly was created by the law of March 14, 1890, which provided that the purchase, sale, importation, exportation, and manufacture of tobacco were the exclusive rights of the State. The cultivation of tobacco was also placed under governmental con-

[9] The inheritance tax varies according to relationship and is progressive, the minimum rate being 1 per cent on small bequests to offspring and the maximum 40 per cent on large estates bequeathed to nonrelatives.

trol. About the same time, the printing and sale of fiscal stamps and stamped paper were placed entirely in the hands of the Monopoly Administration. The monopoly of the sale of salt was instituted by the law of March 17, 1890. The law of August 23, 1893, created new monopolies for the sale of kerosene and cigarette paper and for the manufacture and sale of matches and alcohol.

Upon the formation of the Kingdom of the Serbs, Croats, and Slovenes, the Serbian monopolies absorbed the Montenegro tobacco monopoly which had hitherto been operated by an Italian company. On September 14, 1920, the Serbian monopolies, with the exception of that of alcohol, which had already been abolished in Serbia on July 2, 1920, were extended over the entire Kingdom. At this time, the question of extending to the entire Kingdom the monopoly of saccharine, which had been established in Bosnia-Herzegovina prior to the World War was seriously considered, but nothing was done until the financial law for 1922–23 was voted. This law authorized the Ministry of Finance to extend the saccharine monopoly to the entire territory of the Kingdom, and in principle this has been done but the necessary measures to render the monopoly effective have never been put into force.

Owing to lack of capital for the purchase of supplies and to the difficulty of immediately organizing its services in the new Provinces, the Monopoly Administration was at first unable to meet all the demands for its products. Under these circumstances, the Government imposed import duties on salt, kerosene, matches, and cigarette papers and authorized their sale in the new Provinces by individuals. This transition period proved of considerable value, as the import figures furnished a basis for estimating the domestic consumption of the various articles. By 1922, the monopoly services were so organized that the private importation of articles controlled by the monopoly was forbidden. However, kerosene may still be imported and sold by private concerns upon the payment of the monopoly tax of 4 dinars per kilo, but they must first secure a monopoly permit.

This monopoly tax is collected on imports at the customhouses and on the output of the one refinery (at Brod) upon withdrawal from the warehouse.

The receipts of the monopoly constitute the largest single item of the Government revenue and form about 21 per cent of the budget receipts. The following table shows the monopoly receipts for the various fiscal periods from January 1, 1919, to December 31, 1925:

Periods	Gross receipts	Expenditures	Net receipts
	Dinars	*Dinars*	*Dinars*
Jan. 1, 1919, to May 31, 1919 [1]	10, 180, 584	7, 401, 875	2, 778, 709
June 1, 1919, to May 31, 1920 [1]	156, 092, 205	87, 584, 763	68, 507, 442
June 1, 1920, to May 31, 1921	572, 991, 945	260, 845, 119	312, 146, 826
June 1, 1921, to Dec. 31, 1921	518, 125, 955	156, 150, 720	361, 975, 235
Jan. 1, 1922, to July 31, 1922	731, 145, 555	246, 425, 219	484, 720, 336
Aug. 1, 1922, to June 30, 1923	1, 577, 440, 545	446, 217, 376	1, 131, 223, 169
July 1, 1923, to Mar. 31, 1924	1, 640, 578, 512	447, 518, 420	1, 193, 060, 092
Apr. 1, 1924, to Dec. 31, 1924	2, 889, 680, 911	707, 993, 366	2, 181, 687, 545
Jan. 1, 1925, to July 31, 1925	2, 486, 377, 204	600, 473, 751	1, 885, 903, 453
Aug. 1, 1925, to Dec. 31, 1925	2, 451, 111, 540	411, 103, 097	2, 040, 008, 443

[1] During these two periods the receipts were collected only from the territory of the former Kingdom of Serbia, Montenegro, and Voivodina. Collections from other Provinces were made by the financial delegates of the Ministry of Finance and were not credited in the Monopoly Administration's statements.

Of the total receipts, tobacco furnishes over 1,600,000,000 dinars, or about 70 per cent, salt about 13 per cent, and matches, kerosene, and cigarette paper from 5 to 6 per cent each. The returns from saccharine are negligible, amounting to only 84,000 dinars for the six months ended September 30, 1924.

Monopoly receipts serve as guaranty for the amortization and the payment of the interest on the following loans:

Loans		Issue	Outstanding
1895 4 per cent stock (conversion)	French francs	355, 292, 000	322, 920, 000
1902 5 per cent monopolies	do	60, 000, 000	44, 398, 500
1903 4½ per cent monopolies	do	95, 000, 000	73, 116, 000
1909 4½ per cent monopolies	do	150, 000, 000	128, 099, 500
1913 5 per cent monopolies	do	250, 000, 000	219, 790, 000
1909–47 Montenegro loan	pounds sterling	250, 000	225, 960
1922 external loan	dollars	15, 250, 000	16, 250, 000

All but the last-mentioned loan are secured solely by the monopoly receipts from the territory of the former Kingdom of Serbia. Originally, the Montenegro loan was guaranteed by the tobacco monopoly of Montenegro which was absorbed by the Serbian monopoly in 1918. The monopoly receipts from the territory of the former Kingdom of Serbia are approximately one-third of those from the entire Kingdom and are more than sufficient to meet the annuity and amortization charges of these six loans. The external loan of 1922 is secured by the monopoly receipts from the entire Kingdom, with the exception of those receipts from the territory of prewar Serbia which are required to meet the obligations resulting from the first six loans cited above. This security provides ample cover for the annuities and amortization.

STATE DOMAINS

State domains, which yield about 5 per cent of the Government income, comprise the two large Government estates of Belje and Topolovac, State mines and State forests, and other Government lands. The estates of Belje and Topolovac formerly belonged to the Archduke Friedrich of Austria. The former yields an income of 70,000,000 dinars and the latter about 6,700,000 dinars annually. The Belje estate has an area of about 590 square kilometers, of which 50 per cent is under forests while the remainder is farmed. It possesses a large modern dairy and a sugar factory, the output of which in 1924 was 15,209 metric tons. The estate of Topolovac is much smaller. The Government receipts from State mines amount to 335,000,000 dinars yearly, or about 3 per cent of the annual receipts. The State forests yield about 150,000,000 dinars annually.

STATE MORTGAGE BANK

Under the provisions of the law of August 16, 1862, a State Mortgage Bank, known as the "Uprava Fondova," was founded at Belgrade. This institution continued its functions for the Kingdom of Serbia until 1922, when it was recognized as the "State Mortgage Bank (Drzavna Hipotekarna Banka) of the Kingdom of the Serbs, Croats, and Slovenes" under the provisions of the law of March

30, 1922. This bank has no capital of its own but operates with public and private monies entrusted to it, the State assuming responsibility for its liabilities. The bank was founded to administer funds and properties entrusted to it by the State, by minor subdivisions of the Kingdom, by wards, or by public or private institutions. It issues savings books and cash obligations; receives deposits; issues warrants against mortgage loans; advances money on buildings; grants loans on State securities or on securities guaranteed by the State; discounts bills; grants credits against current accounts, cash, drafts, and securities; issues municipal promissory notes based on claims held against communities, districts, and counties; and makes loans to communities, districts, and counties, on real estate or on the income and additional taxes therefrom. But such loans must be amortized within 50 years.

The State Mortgage Bank is authorized to invest only in first mortgages on municipal building grounds, on buildings which are constructed in accordance with the building regulations, and on agricultural land to the value of the land itself but not including the value of the crops. The mortgages must not exceed 50 per cent of the value of such collateral. Investments can not be made in mines, unproductive land, estates whose productivity can not be ascertained, or real estate which is situated on islands or along the course of rivers and which is in danger of inundation. The evaluation of such property is made by the agents of the bank. The bank is obliged to insure against fire all buildings which serve as a guaranty for any of its loans. All loans must be refunded within 32 years by means of semiannual installments payable in advance. The rate of interest is determined by the Administrative Council. The State Mortgage Bank may recall any loan prior to its maturity if the security has decreased in value and no further security is provided. In general the bank is granted extended privileges regarding the alienation of securities. It may issue, upon the previous approval of the Government, mortgage bonds against the mortgages which it holds, but such bonds may not exceed the amount of the mortgage loans granted.

Mortgage bonds are amortized by means of drawings, as arranged for by the Administrative Council, and are guaranteed by the total claims against which they have been issued, by the reserve funds of the bank and by its entire real estate and movable property, as well as by the guaranty of the State. These bonds are considered in every respect State securities and are (as well as their coupons) free from taxes and imposts.

The administrative council is normally composed of 11 members, five of whom are elected by the Parliament, one by the National Bank, and two by the State Agricultural Council. Two of the remaining members are delegated by the State Council and by the University Council, respectively, from among the members of these institutions. The eleventh member is the director of the bank. Actually the administrative council consists of only five persons. In addition to the administrative council, there is a control committee, consisting of five members appointed by royal decree upon the nomination of the Minister of Commerce and Industry. The control committee must periodically control the accounts and report directly to the Ministry of Finance. The president of this control committee signs

the mortgages issued, certifying at the same time that they have been issued on the basis of the mortgage loans.

The central offices of the State Mortgage Bank are at Belgrade, while branch offices are maintained at Čačak, Cetinje, Jagodina, Niš (Nish), Novi Sad, Pozarevac, Šabac, Skoplje, Smederevo, Split, Valjevo, and Zaječar. Additional branches may be established if necessary.

Nine per cent of the net profits is divided among the management of the administrative council and the personnel of the bank. Twenty per cent of the remainder must be added to the reserve, until it reaches a minimum of 10,000,000 dinars. When the reserve fund has attained this minimum, the entire net profit, after the deduction of the 9 per cent mentioned above, goes to the State Treasury. The reserve fund serves to cover any incidental deficits. The yearly balance sheet, together with the annual statements of the profit and loss, must be drawn up by the administrative council and submitted to the control committee not later than the end of March of the year following the close of the accounting period, which is always the calendar year. The distribution of the net profits for the years 1919 to 1925, inclusive, was as follows:

Years	For administrative council and personnel	Reserve fund	Surplus to National Treasury	Total
	Dinars	*Dinars*	*Dinars*	*Dinars*
1919	844, 878	1, 730, 753	6, 923, 014	9, 498, 645
1920	195, 696	395, 740	1, 582, 962	2, 174, 398
1921	261, 452	528, 714	2, 114, 855	2, 905, 021
1922	1, 250, 026	2, 527, 831	10, 111, 325	13, 889, 182
1923	1, 248, 236	2, 524, 211	10, 096, 844	13, 869, 291
1924	1, 407, 761	2, 846, 807	11, 387, 229	15, 641, 797
1925	1, 656, 513	----------	16, 749, 183	18, 405, 696

The State Mortgage Bank pays 4 to 6 per cent annual interest on deposits and charges 10 per cent annual interest plus 1 per cent commission on loans. The discount rate is 11 per cent.

This institution has, since the war, secured one advance and one loan from the Swiss Bankverein of Basel, Switzerland. The advance was secured on April 21, 1923, the amount being 5,000,000 Swiss francs issued at par. The interest was 6 per cent plus a 4½ per cent commission for opening the account and one quarter of 1 per cent quarterly commission. This advance, which netted 83,333,333 dinars, was made against mortgages and the guaranty of the State.

The loan was contracted on March 20, 1924, for a sum of 15,000,000 Swiss francs, issued at 89 per cent and bearing 6 per cent interest payable semiannually. This loan yielded 208,333,333 dinars and is guaranteed by mortgages and by the State.

The proceeds of these two transactions enabled the State Mortgage Bank to grant credits for the completion of buildings under construction for which the necessary capital was unobtainable locally because of the acute money stringency prevailing at the time.

POSTAL SAVINGS AND "POSTAL CHEQUE" SERVICES

Organization.—Under the Austro-Hungarian régime a postal savings bank functioned in Bosnia-Herzegovina from 1911, with

headquarters at Sarajevo. This institution resumed operations immediately after the formation of the Kingdom of the Serbs, Croats, and Slovenes. On May 1, 1921, it extended its sphere of activity to Dalmatia and on August 8, 1922, it opened an office in Cetinje, Montenegro. By January 15, 1924, its services covered all of Montenegro.

On February 1, 1919, a "postal cheque service" was inaugurated at Ljubljana for the district under the supervision of the post office in that city. Exactly 18 months later a similar institution was organized at Zagreb for the regions under the jurisdiction of the Zagreb and Novi Sad post offices.

All of these services were instituted under authorizations contained in Austro-Hungarian laws applicable to these Provinces—which, in the absence of legislation by the new central Government, continued in force.

The national postal savings and "postal cheque" service was instituted by law in 1921 and was placed under the control and management of the Ministry of Posts and Telegraphs.

Pending the organization at Belgrade of the Central Office, known as the Postal Savings Bank, which was opened on October 1, 1923, "postal cheque" services were established at Belgrade and Skoplje for the territory of Serbia and South Serbia, and these, together with the other previously mentioned regional postal savings and "postal cheque" services, continued to function under State supervision, the office at Sarajevo being designated as the central office.

Functions.—These two services, the operations of which are guaranteed by the State, handle savings accounts, "cheque" and transfer accounts, as well as the circulation of negotiable papers. They may also make loans on paper securities. The annual interest rate on savings accounts can not exceed 4 per cent and on "cheque" accounts 3 per cent. The rates are fixed from time to time by the Minister of Posts and Telegraphs. Amounts exceeding 100 dinars are payable at once, those up to 1,000 dinars within 15 days, and those exceeding 1,000 dinars within 30 days. Interest on deposits is not subject to taxes.

Securities for loans.—The funds and deposits are required to be placed in short and long term investments. The guaranties for long-term loans are restricted by law to securities of the National Government, to provincial, municipal, or communal loans, and to real estate. The law provides that short-term advances can only be covered by paper securities other than stock shares; by short-term loans to well-established banks; by the purchase of drafts; or by the discounting of paper securities and their coupons provided these can be used as securities for loans.

Deficits or profits.—Any deficit in the operation of the postal savings and "postal cheque" services is carried in the State budget. Of the profits, 5 per cent is utilized to provide rewards to meritorious employees; 30 per cent of the remainder is placed in the reserve fund which must equal 5 per cent of the total net deposits at the end of each fiscal year until the reserve fund reaches a minimum of 20,000,000 dinars; and the rest enters the State Treasury as budget receipts.

The annual balance sheet must be controlled by the Ministers of Posts and Telegraphs, of Finances, and of Commerce and Industry and must be published in the Official Journal.

Interchange of service with the United States.—The Postal Savings Bank at Belgrade has established direct relations with the postal service of the United States so that remittances may be exchanged and delivered to any destination in either of the two countries through the agency of the two postal services. During 1925, it received 19,083 remittances amounting to $547,548 (31,929,872 dinars) from the United States and forwarded 390 postal orders valued at $27,598 (1,633,297 dinars) to the United States.

Statistics of operations.—The growing importance of the postal savings and "postal cheque" services in the financial life of the country is evident from the following table:

Years	Cheque Service: Amount of cheque deposits on Dec. 31	Postal Savings Service: Amount of deposits (savings, current accounts, and deposits liquidated but not withdrawn on Dec. 31)	Profit from both services
	Dinars	*Dinars*	*Dinars*
1919	19, 178, 613	9, 637, 213	[1] 10, 700
1920	50, 937, 674	19, 620, 464	455, 995
1921	200, 235, 080	126, 065, 358	3, 869, 748
1922	227, 076, 773	109, 218, 886	3, 697, 500
1923	243, 257, 997	192, 513, 440	7, 407, 013
1924	296, 241, 359	231, 517, 121	18, 419, 652
1925	348, 196, 022	115, 500, 204	33, 659, 712

[1] Deficit.

In 1925, the transactions of the postal savings and "postal cheque" services totaled 134,932,697,703 dinars as compared with 113,468,-740,963 dinars for the previous year and 63,153,956,072 dinars for 1923.

These two postal institutions, both because of the Government guaranty and because of the wide distribution of their offices, which are to be found in many small localities devoid of other banking facilities, make a direct appeal to those whose savings are too small to justify any other form of investment. The "postal cheque" service may easily lead to a more general use of checks, while the postal savings service may prove to be the instrument which will ultimately release for productive purposes the hoarded capital of the peasant element.

STATE LOTTERY

The State Lottery, which is under the administration of the Ministry of Agriculture, is divided into two series with five drawings in each series; the total tickets issued in each series number 150,000 at 400 dinars each, making the gross receipts for both series total 120,000,000 dinars.

The prizes for both series amount to 78,300,000 equally divided between the two series.

After deducting the cost of the administration and other charges, the net receipts to the Government during 1925 totaled 22,554,739 dinars.

NATIONAL DEBT

The national debt of the Kingdom of the Serbs, Croats, and Slovenes is both external and internal. The former may be divided into four categories—pre-war, war, treaty, and postwar obligations.

EXTERNAL DEBT

PRE-WAR DEBT

The pre-war debt consists of the unpaid portions of seven loans contracted by the former Kingdom of Serbia and of two loans contracted by the former Kingdom of Montenegro.

The details of the seven Serbian loans are as follows:

Loans	Amount of issue	Outstanding Sept. 1, 1925	Loans	Amount of issue	Outstanding Sept. 1, 1925
	French francs	*French francs*		*French francs*	*French francs*
1881 2 per cent bonds	33,000,000	16,410,000	1909 4½ per cent monopolies	150,000,000	128,099,500
1888 tobacco loan (lottery)	10,000,000	8,610,000	1913 5 per cent	250,000,000	219,790,000
1895 4 per cent stock (conversion)	355,292,000	322,920,000	Total		813,344,000
1902 5 per cent monopolies	60,000,000	44,398,500	Less enemy holdings		[1] 96,043,500
1906 4½ per cent monopolies	95,000,000	73,116,000	Net total		717,300,500

[1] Under the treaty of Versailles, the interest and amortization of Serbian bonds held by former enemies is not paid. These enemy holdings are 59,389,500 French francs of the 1895 4 per cent stock (conversion) loan and 36,654,000 of the 1909 4½ per cent monopolies loan, making a total of 96,043,500 French francs.

The net total of these seven loans (717,300,500 French francs) [10] equals $28,692,020, or 1,578,061,100 dinars.[11]

All but the first two of these loans are guaranteed by monopoly receipts collected by the autonomous administration of State monopolies from the territory of the former Kingdom of Serbia, which are more than adequate to meet all interest and amortization charges.

The details of the two Montenegrin loans are as follows: 1909–1947 5 per cent loan, total issue £250,000 sterling, outstanding on September 1, 1925, £225,960; 1913 6 per cent loan, total issue, 8,000,000 French francs, outstanding on September 1, 1925, 10,861,104 francs.

The total amount of these two loans equals $1,584,244, or 87,133,420 dinars. The 1909–1947 loan was originally guaranteed by the monopoly receipts of the Kingdom of Montenegro, but as the Montenegrin monopoly has since been absorbed by the Serbian monopoly, this loan is now guaranteed by the monopoly receipts from the territory of the former Kingdom of Serbia. The 6 per cent loan of 1913 was guaranteed by general budget receipts. The annuity and amortization charges of these two loans have been taken over by the Kingdom of the Serbs, Croats, and Slovenes and are being regularly paid.

The total pre-war debt therefore amounts to $30,256,244, or 1,664,093,420 dinars.

[10] The payment of these loans is being made in paper francs, but the French Government is making an effort to secure payment in gold francs.

[11] Conversions are made at the following rates: $1 equals 25 French paper francs or 5 gold francs; 55 dinars; 220 Austrian paper crowns, 4.925 Austrian gold crowns, or 4 shillings. The rate for Austrian paper crowns has been placed at 0.25 dinar, as this is the rate that has been accepted for the settlement of private debts.

WAR DEBT

The war debt consists of advances in money and material made to Serbia by the United States, Great Britain, and France. The details of these advances are:

Items	Pounds sterling or francs	Dollars (or equivalent in dollars)	Equivalent in dinars
UNITED STATES [1]			
Kind and cash		$51,104,595	2,810,752,757
Interest to June 15, 1925		11,752,517	646,388,424
Total		62,857,112	3,457,141,181
GREAT BRITAIN [2]	*Sterling*		
Kind and cash, including interest to Jan. 1, 1926	£31,400,499		
Relief credit (without interest)	1,883,275		
Total	33,283,774	166,418,867	9,153,037,729
FRANCE [3]	*Francs*		
Cash (interest of 5 per cent since June 30, 1924, not included)	1,738,566,000	69,542,640	3,824,845,200

[1] The debt to the United States was funded in 1926. The salient features of the agreement were that $7,112 was immediately paid and the amount funded was $62,850,000. Payments, which are graduated, are to run over a period of 62 years, beginning June 15, 1926, with an annuity of $200,000 and terminating in 1987 with a payment of $2,406,000. No interest is charged on the debt until 1937. The interest rate is likewise progressive, running from 0.12 per cent in 1937 to 3.5 per cent from 1960 to final settlement.
[2] The debt to Great Britain has been funded.
[3] The funding of the debt to France is being negotiated.

The total war debt therefore amounts to $298,818,620 or 16,435,024,110 dinars.

DEBTS RESULTING FROM TREATY OBLIGATIONS

Under the provisions of the treaties of St. Germain and Trianon, the Kingdom assumes a portion of the debt of the former Austro-Hungarian Empire. The Innsbruck protocol and the Prague agreement fixed the amount of this indebtedness as follows:

Designation	Total amount due by the Kingdom	Annuities
	Gold francs	*Gold francs*
Austrian 4 per cent annuities	7,186,313	287,453
Hungarian 4 per cent gold annuities	67,830,503	2,713,220
Austrian 4½ per cent Treasury certificate, 1914	1,288,231	57,970
Hungarian 4 per cent annuities, 1910	10,810,484	432,419
Hungarian 4½ per cent annuities, 1913	5,251,259	236,307
Hungarian 4½ per cent annuities, 1914	19,083,698	858,766
3 per cent loans "Steg" [1]	9,743,471	207,308
"Steg" [1] annuities		169,311
Total	121,193,959	4,962,754

[1] "Steg" stands for "Staat Eisenbahn Gesellschaft" (State Railways).

The total debt of 121,193,959 gold francs is equivalent to $23,390,434, or 1,286,473,870 dinars.

In addition, there are other debts of the former Austro-Hungarian Empire in paper currency which have not yet been distributed by the Reparations Commission among the "succession" or cessionary States.

There is a further charge under this heading of the pre-war loan contracted by the provincial government of Bosnia. This amounts to 19,200,000 gold crowns.

The total debt under this heading therefore amounts to $27,288,911, or 1,500,890,105 dinars.[12]

POSTWAR DEBT

The postwar debt is made up of the following three items:

(1) The first installment of $15,250,000 of the 8 per cent secured external gold loan of 1922. The total loan, amounting to $100,000,000, is to be floated in the United States and is guaranteed by the entire receipts of the Autonomous Administration of the State Monopolies from the former Austro-Hungarian Provinces, as well as by the monopoly receipts from Serbia that are in excess of the amounts required by the guaranties of the pre-war Serbian and Montenegrin loans previously described. For purposes of administration, it has been decided that one-third of the total monopoly receipts for the entire Serbo-Croat-Slovene Kingdom be considered as the part collected from the territory of the former Kingdom of Serbia. This first installment is equivalent to 838,750,000 dinars.

(2) An advance from the French Government of a credit of 300,000,000 French francs for the purchase of material in France. This advance is guaranteed by budgetary receipts and is equivalent to $12,000,000, or 660,000,000 dinars.

(3) The $3,000,000 6 per cent loan guaranteed by budgetary receipts and secured in the United States in September, 1924. This sum is equivalent to 165,000,000 dinars.

(4) The 7½ per cent bonds issued for the purchase of the Guevgueli-Mitrovica-Skoplje Railway—149,971,581 French francs, equivalent to $5,998,863, or 389,937,465 dinars.

The total postwar external debt amounts to $36,248,863, or 1,993,687,478 dinars.

The total external debt may be recapitulated as follows:

Items	Dollars	Dinars
Pre-war debt	30,276,264	1,665,194,520
War debt	298,818,620	16,435,024,100
Debts from treaty obligations	23,390,434	1,286,473,870
Postwar debts	36,248,863	1,993,687,465
Total	388,734,181	21,380,379,955

[12] The Ottoman Empire, prior to the annexation of a considerable part of its national territory by Bulgaria, Greece, and Serbia in 1913 had contracted debts which were guaranteed by the revenues from the entire Empire. The treaty of Lausanne (1923), in order to protect the foreign holders of such bonds, provided for a distribution of these debts between the Successor States, based on the ratio between revenue from the ceded territories and the revenue of the whole Turkish Empire prior to its partition in 1913. The annuities charged against the Serbo-Croat-Slovene State under this plan amounts to 10,471,806 gold francs. The Belgrade Government refused to sign the treaty and has steadfastly maintained that, as the treaty of Bucharest (1913) providing for the annexation of Turkish territory did not obligate Serbia to assume any share of the Ottoman debt, the Kingdom of the Serbs, Croats, and Slovenes is not bound to accept the conditions imposed by the treaty of Lausanne.

INTERNAL DEBT

The internal debt of the Kingdom, with the exception of the autonomous provincial debts, has all been contracted since the World War, and is as follows:

	Dinars
Debt of the National Bank, as of Dec. 31, 1925:	
Conversion of crown notes	1, 152, 923, 315
Advances of money	2, 966, 355, 034
Total	4, 119, 278, 349
7 per cent investment loan of 1921	470, 200, 000
4 per cent agrarian loan	126, 865, 000
2½ per cent reparation bonds (approximately)	4, 200, 000, 000
Autonomous provincial debts	44, 187, 000
Total—dinars	8, 960, 530, 349
Total—dollars	162, 918, 734

The details of the first items are to be found in the section on the National Bank (p. 59). The investment loan of 1921 was floated for the purpose of obtaining funds for the rehabilitation of the railway system, while the proceeds of the 4 per cent agrarian loan were used for the indemnities necessary in carrying out the expropriation and division of the large estates in Bosnia under the agrarian reform.

REPARATION BONDS

The Reparation Bonds were issued in accordance with the law of November 29, 1922, which provided that indemnities due to subjects, institutions, or autonomous administrative bodies of the Kingdom for damages incurred by them during the World War should be paid by 2½ per cent war-indemnity State Lottery bonds payable to bearer and having a nominal value of 1,000 dinars. The amount of damages to which the subjects, institutions, or autonomous administrative bodies were entitled was determined by special courts instituted for that purpose. Claims not exceeding 5,000 dinars are payable in cash, while large claims can be satisfied only by payment in material. Each year 188 lots are drawn, which carry prizes totaling 7,000,000 dinars in even years and 3,500,000 dinars in odd years.

The law provides for the redemption of the bonds within the period of 50 years from January 1, 1924. Such bonds are automatically redeemed when presented in payment for purchases of material from the war booty stocks, when drawn in the lottery, or when redeemed out of funds provided for that purpose.

These bonds were issued by the Government against reparation payments from former enemy states. They enjoy all the rights and privileges attached to state papers, may be deposited with the State as guaranty up to their nominal value, and are accepted by the Treasury in payment of the 500 per cent surtax. They are exempt from taxation.

No special guaranty is provided for the payment of the interest and annuities of these bonds, but they are guaranteed by the State and the law requires that the budget of each year shall provide the necessary funds for the payment of interest on all outstanding bonds, for the redeeming of the bonds drawn in the lottery, and for the lottery prizes.

REPARATION PAYMENTS

The Kingdom is receiving payments on account of reparations from Germany, Bulgaria, and Hungary.

Germany.—Of the total reparation payments made by Germany 5 per cent are allotted to the Kingdom of the Serbs, Croats, and Slovenes. Payments are made in materials. Prior to the putting into force of the Dawes plan on September 1, 1924, the Kingdom had received reparations from Germany to the value of 262,940,000 gold marks. Payments under the Dawes plan from September 1, 1924, to April, 1925, amounted to 19,632,155 gold marks. During the second annuity year, starting May 1, 1925, the monthly quota was fixed at 2,580,000 gold marks.

Bulgaria.—Bulgarian reparation payments have been fixed at 2,250,000,000 gold francs, of which 10 per cent, or 225,000,000 gold francs, are to be paid to the Kingdom of the Serbs, Croats, and Slovenes. The payments are divided into two parts:

(*a*) 50,000,000 gold francs to be paid in semiannual installments over a period of 60 years, dating from October 1, 1923. Interest at 5 per cent is charged on this account.

(*b*) 175,000,000 gold francs, to be paid in annuities beginning April 1, 1953. During this lapse of time no interest will be charged.

Bulgaria has also been obliged to restore or make compensation for material which was destroyed or carried off by its armies during the war. The restitution comprised livestock, railway material, and the delivery annually of 50,000 tons of coal during five years from August 9, 1920.

Hungary.—The Kingdom of the Serbs, Croats, and Slovenes is receiving at the rate of 880 metric tons of coal per working day from the mines of Pecuj, Hungary, on account of reparations. These deliveries started in September, 1921, and should be completed in September, 1926. In addition to the coal deliveries the Kingdom is to receive a total of 200,000,000 gold crowns payable in semiannual installments beginning on June 30, 1926, and terminating on December 31, 1943. Payments during the first year amount to 5,000,000 gold crowns and increase progressively until they reach 14,000,000 gold crowns annually.

During 1922 and 1923 there were deliveries of livestock valued at 3,765,000 gold crowns. Under an agreement dated February 3, 1924, Hungary also has to deliver 80 locomotives and 1,185 railway cars within a period of four years beginning September 12, 1926.

Austria.—The question of reparations due from Austria has been postponed for a period of 30 years from December, 1922, in order to permit that country to recover economically from the effects of the war.

FLOATING DEBT

In addition to the previously described obligations of the State, the Government has a small floating debt. At the close of 1922, this totalled 1,400,383,033 dinars, but by June 30, 1925, it had been reduced to 452,871,736 dinars,[13] or $8,234,031.

[13] These figures are taken from a publication of the Ministry of Finance, entitled "Statistical Data on the Financial Position of the Kingdom of the Serbs, Croats, and Slovenes."

TOTAL DEBT

The total debt of the Kingdom is as follows:

Items	Dollars	Dinars
External debt	388, 734, 181	21, 380, 379, 955
Internal debt	162, 918, 734	8, 960, 530, 349
Floating debt	8, 234, 031	452, 871, 736
Total	559, 886, 946	30, 793, 782, 040

At the present estimated population of 13,000,000 inhabitants, the per capita debt is 2,368 dinars, or about $43. These figures do not take into consideration the diminution of the American debt and the expected reduction in the debts to England and France from funding operations. It is reasonable to suppose that these debt settlements will reduce the entire war debt by 50 per cent, or by about 8,250,000,000 dinars ($150,000,000), in which case the per capita debt would approximate 1,734 dinars, or $31.50.

The 1926–1927 budget estimates carry 571,024,582 dinars ($10,384,226) for amortization, interest, and other expenses in connection with the public debt, but this includes no payments on the war debts, none of which had been funded at the time the budget was voted. To this sum must be added $200,000, or 11,000,000 dinars, for the initial annuity to the United States. The present annual per capita charge is therefore approximately 44 dinars, or $0.80.

TARIFF POLICY

Conditions immediately following the unification of the Kingdom were such that the tariff policy was necessarily directed toward increasing the State revenue rather than toward the real economic needs of the country, and both import and export duties were levied on this basis. However, as soon as the tax-collecting agencies began to function more normally, the tariff policy veered toward its real purpose and export duties were progressively reduced, while the import tariff was modified and divided into three distinct categories:

1. On commodities produced within the Kingdom in such quantities as to approximate the domestic requirements, protective duties were levied.
2. On articles of luxury high duties were imposed in order to discourage importation, to facilitate an early realization of a favorable trade balance, and so that the duties on such articles actually entering the country would swell Government receipts.
3. Commodities of general consumption, the domestic needs for which must be met by purchases abroad, are either exempt from duties or else pay low rates.

The most recent tariff, which was promulgated on June 19, 1925, reflected clearly this policy as regards both imports and exports.

The rates of duty in both the export and the import tariff are subject to modifications by the Ministerial Council at any time, and such modification must be submitted for ratification to Parliament within 15 days if in session or within 15 days from its assembling, if not in session.

AGIO

The rates in both the export and import tariff are stated in gold dinars, but payment of the duties may be made in paper dinars at a rate which is fixed by the Ministry of Finance. The present agio is 10, which means that for purposes of customs collection 1 gold dinar is equal to 11 paper dinars.

EXPORT TARIFF

The rates of duty in the export tariff are all specific. The present tariff covers only a very small range of articles, and the rates upon these are so small as not to offer any serious handicap to the development of sales abroad. The expressed policy of the Government is to reduce or entirely remove the existing duties whenever it becomes evident that they are proving to be restrictive. The Government, however, may decree an embargo on foodstuffs or else place very high export duties on such articles in the case of a crop shortage in order to conserve a sufficient food supply for the needs of the domestic population.

IMPORT TARIFF

The rates of duty in the tariff, with the exception of a few schedules, which entirely relate to vehicles, upon which ad valorem duties are assessed, are all specific. The specific duties are assessed on the gross weight of goods the duties of which are presumed not to exceed 10 dinars per kilo; on the actual weight of the goods when they are of such a nature as not to require packing; and in all other cases on the net weight. The net weight is obtained by subtracting from the gross weight the weight of the packing (tare) or by actually weighing.

Ad valorem duties are assessed on the foreign market value of goods plus all expenses and charges, including freight and insurance to the port of entry.

Naturally the agio does not apply to ad valorem duties. The tariff comprises both a maximum and a minimum schedule, the latter being reserved to those countries which have commercial treaties with the Kingdom. Commodities from the United States pay the minimum rates.

COMMERCIAL TREATIES

The Kingdom of the Serbs, Croats, and Slovenes, by a decision of the Ministerial Council, dated March 11, 1919, recognized the validity of the commercial treaties of the former Kingdom of Serbia with Belgium, France, Italy, Great Britain, Switzerland, the Netherlands, Greece, Denmark, Norway, Sweden, Spain, Portugal, Rumania, and the United States and made them applicable to the entire Kingdom. This ministerial decision was on October 26, 1920, enacted into law as article 175 of the provisional financial law for 1920–21. The agreements with Belgium, France, Italy, Great Britain, and Switzerland contained tariff schedules, while those with other countries only provided for the most-favored-nation treatment.

Imports from all of the treaty countries are entitled to the minimum duties. These conventions stipulated that they would continue in force for one year from the date of denunciation.

The British and French pre-war treaties with the Kingdom of the Serbs, Croats, and Slovenes were both denounced by the Kingdom on June 19, 1925, contemporaneously with the promulgation of the new Yugoslav customs tariffs, and both theoretically terminated one year after the date of denunciation. At present Great Britain and France have mutual most-favored-nation agreements with the Kingdom pending the conclusion of permanent treaties.

The Belgian pre-war treaty with the Serb-Croat-Slovene State was denounced by the latter country on January 16, 1926.

Greece and Rumania denounced their pre-war treaties—the latter treaty terminating in April, 1922, with no modus vivendi to take its place, and the former being supplanted by a modus vivendi by which Greece and the Kingdom of the Serbs, Croats, and Slovenes grant mutual most-favored-nation treatment.

The Italian pre-war convention with Serbia has been set aside by a new treaty which entered into force at the same time as the promulgation of the customs tariff of June 19, 1925, although ratification has not yet taken place. This convention contains a tariff section providing specially reduced duties on specified products.

With the exception of the six treaties which have been abrogated, as shown above, all of the previously listed conventions of pre-war Serbia are now in force. In addition to the treaty with Italy, agreements have been negotiated since 1919 with Czechoslovakia, Austria, Germany, and Hungary.

The convention with Czechoslovakia, which was concluded in 1920 for a period of one year and which automatically remains in force until denounced, provides for most-favored-nation treatment. This convention contains no tariff schedules but only a reciprocal agreement regarding the exchange of contingents of specified commodities.

In 1920 a compensation treaty was negotiated with Austria, providing for the exchange of contingents of designated articles and granting most-favored-nation treatment. A new commercial treaty was concluded with Austria in 1925, carrying a tariff section.

Poland enjoys most-favored-nation treatment by virtue of a convention ratified in 1923. It was negotiated for one year, but its validity will automatically continue until denounced.

The treaty with Germany was ratified in June, 1922, and provides for most-favored-nation treatment. It contains no tariff schedule but grants special facilities for the importation of German printed matter and lithographic products.

An agreement with Japan reciprocally granting most-favored-nation treatment was ratified in 1926.

The convention with Hungary is a provisional one and provides for most-favored-nation treatment.

Imports from Egypt pay the minimum duties, as they are still regarded as coming from a British possession.

Luxemburg is considered as being part of a customs union with Belgium and receives most-favored-nation treatment.

Fiume still enjoys most-favored-nation treatment, not as an Italian port, but as a separate political entity.

Imports from Canada, India, and all British colonies and protectorates pay the minimum duties, as do British goods from Aden, Singapore, and Zanzibar.

The principal characteristics of the conventions providing for most-favored-nation treatment are:

1. Full liberty of action in the fixing of export and import duties.
2. Transportation and navigation between the contracting States to be unrestricted.
3. Recognition of the right of unrestricted transit in so far as this right does not conflict with the vital interests of the State such as quarantine requirements and police measures.
4. The right of nationals of one State to acquire and dispose of real property in the other State is granted on the basis of reciprocity.
5. Commercial travelers are to enjoy liberty of movement.
6. The nationals of one State residing in the territory of the other State are guaranteed full legal and judicial protection.
7. The principle of the most-favored-nation treatment is specifically recognized.

No commercial agreements exist with Bulgaria, Turkey, Albania, or Russia, and imports from these countries pay the maximum duties. A treaty has been concluded with Albania, but it has not been ratified and imports from that country will continue to pay the maximum duties until ratification.

TRANSPORTATION AND COMMUNICATION

PORTS AND HARBORS

In the distribution of domestic and imported products in the country and in the development of its foreign commerce, the Kingdom of the Serbs, Croats, and Slovenes uses every form of transportation and communication, including maritime, river, canal, rail, and airplane services. Within the Kingdom the products of the country are delivered to the nearest shipping or consuming centers, for the most part, by carts drawn by oxen or horses, although the automobile is beginning to be used for such purposes.

The bulk of the foreign commerce of the Kingdom passes through the foreign ports of Trieste, Fiume, and Saloniki or is transported by rail or by Danube steamers. Consequently the domestic ports of the Kingdom, which are all situated on the Adriatic coast, share a very small portion of the entire foreign trade of the Kingdom.

The Kingdom of the Serbs, Croats, and Slovenes, with the exception of that part of the western frontier formed by the Adriatic Sea, is entirely bounded by land areas. The coast line which runs in a southeasterly direction from the Italian to the Albanian frontier has a total length of 680 miles and, although heavily indented, is paralleled by a chain of high mountains which fringe the entire coast, rendering access to the harbors from the hinterland exceedingly difficult and providing little space for warehouses and for other necessary port works.

CONVENIENT FOREIGN PORTS

Prior to the World War the bulk of the trade of the southern Austro-Hungarian Provinces, which have since been incorporated in the Serbo-Croat-Slovene State, was handled through the Austrian port of Trieste and the Hungarian port of Fiume, both of which are now integral parts of Italy.

TRIESTE

The geographical position of Trieste, combined with the fact that it is the terminus of the Belgrade railway trunk line, makes it the natural port for Slovenia and the western Save River Valley. The political frontier now separating that port from its hinterland, in a measure, hinders traffic, but Trieste will continue to be the chief port of Slovenia and Croatia-Slavonia pending the development of Sušak or some other domestic port in northern Dalmatia.

Serbo-Croat-Slovene traffic passing through the port of Trieste during 1924 totaled 70,069 tons, of which 56,171 tons were exports and 13,898 tons were imports.

FIUME

Fiume (Italy) was formerly the port for Hungary. Since the World War, it has lost its hinterland and is dependent entirely upon Serbo-

Croat-Slovene traffic for its existence. Recognizing this fact, Italy in January, 1924, leased the Thaon de Revel basin to the Kingdom of the Serbs, Croats, and Slovenes for a period of 50 years for the nominal annual rental of 1 gold lira. Should the Belgrade Government realize its policy of developing domestic ports to such a point that they can handle all the country's Adriatic traffic, Fiume is expected to decline in importance despite its excellent facilities and equipment.

The 1924 traffic between Fiume and the Kingdom of the Serbs, Croats, and Slovenes totaled 283,455 metric tons of imports and 51,281 metric tons of exports.

SALONIKI (GREECE)

The foreign commerce of southern Serbia has always passed through the port of Saloniki, formerly Turkish and now Greek, as this Kingdom has never had an outlet on the Aegean Sea.

This economic dependence of South Serbia upon the port of Saloniki resulted in the conclusion in 1923 of an agreement with Greece whereby a zone comprising 94,000 square meters in the port of Saloniki was ceded to the Kingdom of the Serbs, Croats, and Slovenes for a period of 50 years. No payment is exacted for terrain belonging to the Greek State or to the municipality of Saloniki, but all expropriation of private property for this zone, which is known as the Serbian Free Zone, must be reimbursed by the cessionary State.

The zone remains under Greek sovereignty and subject to Greek law and police regulations but is to be administered by the Serbo-Croat-Slovene customs authorities. Goods traversing the Serbian Free Zone en route to or from the more northern State are considered in transit, and Greece undertakes to place no hindrances on such traffic and to exempt such goods from all duties and contributions.

The Belgrade Government desires to obtain administrative control over the railway linking the port with the frontier at Guevgueli in order to overcome the disadvantage of high freight rates and the delays now encountered on this line.

In 1910 over 80,000 tons of Serbian exports and more than 10,000 tons of goods for Serbia passed through Saloniki.

In 1924, Serbo-Croat-Slovene traffic passing through the port of Saloniki totaled 176,500 tons, of which 12,600 tons were exports in transit to foreign countries, 35,000 tons were imports and 128,900 tons were held in Greece either for consumption or for reexport.

DOMESTIC PORTS

To be independent of Fiume and Trieste, it was necessary for the Kingdom to seek an outlet for the commerce of the western and northern sections of the country through domestic Adriatic ports which have hitherto received little attention and are consequently comparatively undeveloped.

The principal domestic harbors on the Adriatic are (from north to south), Sušak, Bakar, Šibenik, Split (Spalato), Metković, Gruž, and Kotor (Cattaro).

A brief description of the domestic Adriatic ports, which serve the hinterland of Dalmatia, Slovenia, Croatia-Slavonia, Bosnia-Herzegovina, and Montenegro, follows:

SUŠAK

Sušak is a small port on the extreme northern sea-frontier of the Kingdom. It adjoins the port of Fiume which was developed by the Hungarians for their commerce. The proximity of Fiume has been the cause of the lack of development of Sušak, and it has been only since the annexation of Fiume by Italy that the development of Sušak as an important port has been considered. A standard-gauge line passing through Karlovac connects it with the Trieste-Ljubljana-Zagreb-Belgrade trunk line. It is primarily a lumber-export port.

The quays and port equipment are all found in that portion of Sušak which is known as Port Baros and which is an artificial basin constructed by the Hungarians in pre-war days as a part of the port of Fiume.

The depth of the water in the middle of the bay of Sušak varies between 15 and 25 meters. Alongside the quays the average depth is 8 meters. In the Mrtvi Canal the water is only from 3½ to 5 meters deep.

Direct unloading and loading at the quayside is possible. The quays are of pre-war construction and have a frontage of 1,903 meters, of which 1,760 meters may be used for vessels. Railway sidings run along 833 meters of the quays.

The capacity of the two warehouses, which are on the Karageorge quay, is 10,050 cubic meters, or about 1,240 metric tons. Warehouse charges are not fixed, as the warehouses are in course of repair.

There is an abundant supply of stevedores. Charges are not fixed, as the various cooperative societies of workers compete for this work. It is claimed that charges are lower at Sušak than at Fiume. About 3,500 tons of cargo can be loaded or discharged daily.

Lighterage is unnecessary. Pilotage is compulsory, but no charge is made for this service.

The water is supplied from 18 hydrants and is of good quality. The large pipes have a flow of 25 tons per hour and the smaller ones 12 tons per hour. Adequate supplies of coal are available.

Seven cranes of 3.5 tons capacity each are in service.

BAKAR

Bakar is about 10 kilometers down the coast from Sušak and is situated in a well-sheltered, oval bay which is connected with the Adriatic by a narrow channel. Like Sušak this is principally an export port for lumber and cattle. The bay has a length of about 4.75 kilometers and a width of approximately 1 kilometer. The entrance into the harbor is 300 meters wide and 44 meters deep. The minimum depth of the roadstead is 19 meters. This port has not been developed because of the difficulty of connecting it with the railway system, steep hills (which rise abruptly from the bay) also limiting the space for warehouses. The present railway station for the port on the normal-gauge Sušak-Zagreb line is 240 meters above sea level and at a distance of several kilometers from the harbor. A project to build a gravity railway connecting the port with the Sušak-Zagreb normal-gauge line was submitted to the Government in 1922, but the plan was later abandoned.

There are five warehouses, all in private hands, with a capacity of 20,300 metric tons. There are 400 meters of quays for large vessels

and 300 meters for small vessels. But the ships can not come alongside and have to anchor at about 5 or 6 meters from the shore because of sand banks.

The port equipment is meager, but stevedores are available at reasonable prices. Water is obtainable from a private hydrant on the quays, which has a capacity of 40 tons a day, or from a motor pump of a private concern on the northern quay which has a capacity of 6 tons an hour.

ŠIBENIK

The port of Šibenik is about midway between the Italian and the Albanian frontier. The bay is large and well protected and is entered from the Adriatic Sea by a narrow channel. It is connected with Zagreb by a standard-gauge railway which branches off from the Sušak-Zagreb line near Ogulin, Croatia, and is also linked with the neighboring port of Split by a continuation of the same line. This port, although of considerable importance, suffers by its proximity to the larger and more developed harbor of Split. Its trade consists chiefly in the exportation of cement, bauxite, cellulose, cyanamid, lumber, and raw materials.

In the harbor channel the maximum depth is 46 meters and the minimum 20 meters. The maximum depth in the harbor is 40 meters and the minimum 8 meters. Alongside the quays the depth varies between 4 and 15 meters.

Large steamers can be unloaded at seven points on the quays, which have a length of 1,800 meters, of which 700 meters are equipped with railway lines.

The quays in this harbor are of pre-war construction. Work has recently been begun on a new mole with an unloading surface of 140 square meters. It will require two years' work to complete this mole. There are no warehouses, public or private, on the quays.

There is an electric crane for unloading cargoes and two electric cranes for the unloading of coal and similar products, but as a rule loading and discharging must be done by boat winches. The supply of stevedores is adequate. Lighterage is also available. About 800 tons of cargo are handled daily.

Ships can bunker here, but the coal available ranges only from 4,500 to 5,000 calories.

Pilotage is not compulsory but pilots are available at Zlarin. The charge for entrance and outward pilotage is 800 dinars.

Two hydrants in the harbor provide water for the smaller boats. Larger vessels may have water pumped from water boats.

SPLIT

Split, the most important harbor in the Kingdom, is situated about 60 kilometers from Šibenik, with which it is connected by a standard-gauge railway. It also has direct normal-gauge service with Zagreb. Its future will be greatly enhanced by the completion of the Una River standard-gauge line which has been completed as far south as Bihač. The Bihač-Zrmanja section which remains to be constructed is only about 70 kilometers long and should be built in the comparatively near future.

The port is divided into two harbors. The northern one is the smaller and is almost exclusively reserved for the export of cement.

FIG. 5.—Port of Split (Spalato)

The factories which are adjacent to the port have their own electric cranes for loading. The daily cargo traffic is about 2,300 tons.

The southern harbor is larger but is not so well equipped, and loading and discharging must be done by hand or by boat winches. It handles about 3,700 tons of cargo daily.

There is a considerable variation in the depth of water alongside the 2,355 meters of quays. Along the 385 meters of new quays now being built, the depth is from 10 meters to 50 meters; along 404 meters of quays, it is 6.5 meters; and along the remainder, it varies from 1 meter to 3.5 meters.

A railway line of 350 meters has been built along the quays.

Two private warehouses are in operation.

The labor supply is sufficient. Loading and unloading charges are reasonable. Pilotage is not required but is available for a very low fee. Water and coal supplies are said to be adequate.

Credits of 9,600,000 dinars have been voted for the construction of the Split railway terminus.

METKOVIĆ

The port of Metković, which is midway between Split and Dubrovnik, is formed by the mouth of the Neretva River and is protected by a long narrow peninsula which runs from the mainland south of the port in a northwesterly direction. As the mountain range here lies farther back from the coast than is the case with the other Adriatic ports, adequate space for the development of a large port is available. At one time careful consideration was given to a plan to develop Metković as the most important harbor of the Kingdom and to make it the terminal of the proposed Belgrade-Adriatic railway, but this plan seems to have been discarded because of the need of constantly dredging the harbor, which fills up rapidly with sand brought down by the Neretva River.

Metković is connected by a short, narrow-gauge spur with the Bosnian narrow-gauge railway, running from Brod through Sarajevo, Mostar, Gruž, to Zelenika on the Bay of Kotor.

The port facilities are exceedingly restricted, and no modern equipment is available. Despite these drawbacks a considerable amount of Bosnian lumber is exported through this port, which moves about 100 tons of cargo daily by hand or by boat winches.

GRUŽ

The port of Gruž is the commercial port for southern Dalmatia, southern Bosnia, Herzegovina, and Montenegro. It is 5 kilometers distant from Dubrovnik and is a part of that municipality. The Bosnian narrow-gauge railway, from Brod through Sarajevo and Mostar to Zelenika, touches at Gruž.

Unlike the other ports of the Kingdom, Gruž handles, in addition to the export of lumber and other raw materials, a considerable volume of imports and has direct connections with the United States, England, France, and Greece. Imports from the United States reach this port on the steamers of the Cosulich Line of Trieste, Italy, which touch here on their homeward voyages. Several British steamship lines link this port with English ports.

The port is equipped with 600 meters of stone and concrete quays. The minimum depth of the water alongside the quays is 21 feet. Vessels drawing more than this must discharge or load by lighters. Vessels exceeding 475 feet in length, owing to the difficulty in maneuvering in the port, have to anchor outside.

Railway lines connecting the port with the railway station are laid alongside the quays so that cargoes can be loaded direct from car into vessel or vice versa. A small tug is available as well as tenders for disembarking passengers. Water is obtainable from a main on the quays. The warehouse facilities comprise a bonded warehouse, several private "magazines," and a new warehouse of about 520,000 cubic feet capacity belonging to the State Railways; this new installation comprises four stories, each 203 feet long, 57 feet wide, and 46 feet high and is equipped with two electric inside elevators and two electric outside cranes of 2½ tons capacity each, which are not working for lack of current. Consequently all loading and unloading is now done by hand or by boat winches. About 850 tons of cargo are handled daily.

DUBROVNIK

The port of Dubrovnik (Ragusa), has no commercial importance and is too small to serve any useful purpose except as a harbor for fishing boats and small sailing vessels.

KOTOR

The bay of Kotor (Cattaro) is not far from the Albanian frontier. It is a deep, well-protected harbor running about 25 kilometers inland from the entrance channel. The depth of the water in the bay ranges from 8 to 15 meters, and the channel may be entered by vessels of any size. Pilotage is not required, but, if it is desired, the master of the vessel should apply in advance to the captain of the port who will send a pilot to Porto-Rose (opposite Ercegovci) at the entrance of the bay. There are no fixed charges for this service.

Despite the fact that Kotor is one of the best harbors in Europe, it has never been developed as a commercial port. However, in pre-war times it was one of the principal bases of the Austro-Hungarian Navy. One of the prime reasons for its lack of commercial development is the inadequate communication with the hinterland. The Bosnian narrow-gauge railway line has a southern terminal at Zelenika on the bay of Kotor, but, as this line has a limited capacity and passes through Gruz on its way to important commercial centers, it is more advantageous to use the port of Gruz. A number of small ports are found in the bay of Kotor. The principal ones are Tivat (where there is an arsenal which was erected for the use of the Austro-Hungarian navy), Zelenika, and Kotor.

At Tivat, the only harbor works are the arsenal and a few miles of quays which were erected for the use of the Austrian navy. The daily loading and unloading capacity is about 400 tons. There are no cranes, and cargo must be moved by boat winches or by hand.

At Kotor the total length of the quays is 660 meters, of which 196 meters are being enlarged to measure 5 meters in width. The depth of the water along the quays varies from 4 to 7 meters.

FIG. 6.—Bay of Kotor (Cattaro)

Zelenika is a small port and the terminal of the Bosnian narrow-gauge railway. It has no mechanical equipment for cargoes, and these must be moved by hand or by boat winches. About 350 tons a day can be handled in this way.

The original plans for the construction of the projected Belgrade-Adriatic railway provided for a terminal at Tivat on the bay of Kotor. This site was chosen because Tivat is located on the edge of a comparatively large plain which is capable of furnishing space for the construction of the requisite warehouses, trackage, and other port works, necessary to the development of a large shipping center. Although the surveys show that the construction of the railway is perfectly feasible and that the harbor is unquestionably capable of greater development than any other in the Kingdom, no definite decision has been taken in this sense and it now seems probable that the eventual Belgrade-Adriatic line will have its maritime terminal at Split.

PORT REGULATIONS AND DUES

All vessels arriving from abroad are required to present the usual bills of health, crew lists, and manifests to the port authorities.

Domestic steamers arriving from abroad pay for their first and second entries, during a calendar year, 1 dinar for each net ton; for third and fourth entries 0.75 dinar; and for all succeeding entries during the same calendar year, 0.50 dinar. Such steamers arriving from a domestic port pay upon each entry 0.50 dinar for each net ton.

Sailing vessels of domestic register of 100 net tons burden or less pay 0.10 dinar per net ton for each entry if coming from abroad or 0.05 dinar if coming from domestic ports. Such vessels of larger burden pay 2.50 dinars per net ton for each entry if coming from abroad or 1.25 dinars if coming from a domestic port. A supplement of 50 per cent is charged to all sailing vessels equipped with an auxiliary motor.

Ships registered in countries which have treaties or conventions with the Kingdom providing for most-favored-nation treatment pay the same dues as domestic vessels, and all others pay 2.50 dinars per net ton for each entry. Vessels of United States registry pay the lower rates.

PORT TRAFFIC

There are no statistics showing the tonnage of freight actually handled in the various ports and the only indication of the importance of the several ports is furnished by data relating to the arrivals and clearances of vessels. Such figures, for 1924, are as follows:

Traffic at Yugoslav Ports

ARRIVALS, 1924

Items	Sušak	Šibenik	Split	Gruz	Kotor	Others	Total
Coastwise:							
Number of ships	1,971	1,557	5,166	1,326	1,285	37,175	48,480
Tonnage	201,000	272,000	785,000	269,000	164,000	3,530,000	5,221,000
From Italy:							
Number of ships	300	593	1,397	743	62	2,698	5,793
Tonnage	111,000	245,000	693,000	334,000	32,000	332,000	1,747,000
From Greece:							
Number of ships	43	1	120	133	90	83	470
Tonnage	21,000	2,000	61,000	60,000	47,000	39,000	230,000
From England:							
Number of ships	9	5	14	59	1	3	91
Tonnage	20,000	9,000	24,000	88,000	1,000	2,000	144,000
From France:							
Number of ships	1	----------	2	8	----------	1	12
Tonnage	1,000	----------	1,000	14,000	----------	----------	16,000
From United States:							
Number of ships	----------	----------	----------	13	----------	----------	13
Tonnage	----------	----------	----------	77,000	----------	----------	77,000
From other countries:							
Number of ships	2	----------	20	53	2	151	228
Tonnage	3,000	----------	13,000	25,000	7,000	37,000	85,000
Total:							*Grand total*
Number of ships	2,326	2,156	6,719	2,335	1,440	40,111	55,087
Tonnage	357,000	528,000	1,577,000	867,000	251,000	3,940,000	7,520,000

CLEARANCES, 1924

Coastwise:							
Number of ships	1,914	1,481	5,240	1,277	1,287	36,751	47,950
Tonnage	185,000	249,000	814,000	219,000	165,000	3,521,000	5,153,000
To Italy:							
Number of ships	226	626	1,175	771	63	3,051	5,912
Tonnage	48,000	211,000	399,000	397,000	39,000	323,000	1,417,000
To Greece:							
Number of ships	60	1	143	120	89	111	524
Tonnage	33,000	----------	90,000	65,000	47,000	40,000	275,000
To England:							
Number of ships	2	5	9	59	----------	3	78
Tonnage	2,000	12,000	16,000	95,000	----------	4,000	129,000
To France:							
Number of ships	28	----------	2	35	----------	9	74
Tonnage	34,000	----------	10,000	46,000	----------	7,000	97,000
To United States:							
Number of ships	----------	8	----------	----------	----------	----------	8
Tonnage	----------	21,000	----------	----------	----------	----------	21,000
To other countries:							
Number of ships	23	32	119	69	1	224	468
Tonnage	42,000	34,000	244,000	36,000	----------	58,000	414,000
Total:							*Grand total*
Number of ships	2,253	2,153	6,688	2,331	1,440	40,149	55,014
Tonnage	344,000	527,000	1,573,000	858,000	251,000	3,953,000	7,506,000

At the present time coastwise traffic forms 70 per cent and foreign traffic 30 per cent of the total port movements.

The rank of the ports by tonnage of vessels is as follows:

Ports	Total traffic	Coastwise traffic	Foreign traffic
	Per cent	*Per cent*	*Per cent*
Split	21	15	34
Gruž	12	5	26
Šibenik	7	5	11
Sušak	5	4	7
Kotor	3	3	4
Others	52	68	18
Total	100	100	100

About 76 per cent of the maritime tonnage calling at Dalmatian ports from abroad comes from Italy, 10 per cent from Greece, 6 per cent from England, 3.5 per cent from the United States, and 4.5 per cent from other countries.

COMMERCIAL FLEET

There are 18 navigation companies registered in the Kingdom and operating maritime services from domestic Adriatic ports under the Serbo-Croat-Slovene flag. Of these, 9 are engaged in coastwise traffic and 9 in oversea trade.

Their combined steamer fleet (January, 1925) is as follows:

Items	High sea	Large coastwise	Small coastwise	Total
Number	39	11	103	155
Tonnage:				
Gross	140,599	10,374	26,217	177,190
Net	87,850	6,061	13,095	108,006

In addition, they own and operate 662 sailing vessels of 7,850 net tons, and 27 vessels with motors totaling 352 net tons burden.

SHIPBUILDING AND REPAIRS

There are 14 shipyards in the Kingdom with a combined area of 42,365 square meters and employing 548 workmen. The largest are at Kraljevica, Zurkovo, and Split. The Kraljevica plant is able to build and repair vessels up to 10,000 tons; the "Marjan" (Split) is equipped only for constructing and repairing vessels of 2,000 tons or less; while the Yug (Split) and Zurkovo yards are unable to build or repair vessels exceeding 1,000 tons. The others are able to handle only small wooden ships. Between 1921 and 1924 the output of the shipyards was as follows:

Items	1921	1922	1923	1924
Sailing vessels	2	10	28	20
Canoes	107	158	203	225
Tons	585	698	899	1,392

In addition to the shipyards, there are 43 repair docks with a combined area of 4,465 square meters, in which 176 workmen are employed. Practically every port along the Dalmatian coast has one or more docks of this kind. During the period from 1921 to the close of 1924 repairs to a value of 32,724,174 dinars were effected in the docks and shipyards on a total tonnage of 129,918. These repairs were made on steamers, sailing vessels, and canoes.

MARITIME SERVICES

The domestic navigation companies maintain frequent express and ordinary coastwise steamer services for both passengers and freight, touching at practically every port on the Dalmatian coast.

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FIG. 7

They also operate a semimonthly passenger and freight service to Zara, Trieste, Fiume, Valona, Corfu, Patras, and other Italian, Albanian, and Greek ports, as well as freight services to Trieste, Valona, Corfu, Patras, Piraeus, Saloniki, the Greek Islands, and intermediate ports and a monthly service to Marseille, Barcelona, Malaga, Valencia, Oran, Tangier, Casablanca, Teneriffe, Las Palmas, and other ports. In addition to these regular lines the high-sea steamers make irregular voyages to oversea countries as the demands for such trips occur. Such vessels frequently proceed to South America, England, France, and other distant countries.

The Dalmatian ports are also regularly visited by the steamers of the following companies:

Lloyd Triestino (Trieste–Gruz–Trieste); twice monthly.
Ellerman-Wilson Line, from the English ports for the ports of the Mediterranean Sea, via Gruz for Trieste; three times monthly.
Cunard Line, from English ports, by the Mediterranean Sea and Gruz for Trieste; three times monthly.
Cosulich Line, Trieste–New York–Trieste via Gruž; once monthly.

In addition to these regular lines, a number of foreign tramp steamers, the majority of which are Italian, call at domestic ports for the purpose of discharging or taking on cargo.

RAILWAY COMMUNICATIONS

CONDITION OF RAILWAYS SUBSEQUENT TO THE WAR

Immediately following the armistice in 1918, the new Government assumed control of all the railroads in the former Austro-Hungarian Provinces, with the exception of the Südbahn, which was a private corporation, and a few minor private lines constructed for industrial purposes. The railroads of pre-war Serbia were already for the most part the property of the Government. The total length of the railway lines, at that time, approximated 9,000 kilometers, of which 1,600 kilometers were on Serbian territory. About two-thirds of these railways were of normal gauge. Those in Serbia had been almost entirely destroyed by the invaders, who not only wrecked the bridges and tore up the tracks but even carried off a large part of the rolling stock. The lines in the former Austro-Hungarian Provinces were intact, but their roadbeds, owing to the lack of upkeep, were in a wretched condition and the bulk of the rolling stock had been withdrawn from this territory, the little that remained being in a dilapidated state.

Unfortunately the railroads of the Kingdom did not constitute a real system, as it had been the Austro-Hungarian political policy to limit as far as possible the intercourse between the various Provinces, as well as with the former Kingdom of Serbia. The Belgrade-Zemun bridge across the Save River, which linked the western European system with the Serbian railroads, had been destroyed. The new Government immediately set to work to improve the transportation facilities of the Kingdom, and by August, 1919, the entire railway system of pre-war Serbia had been reconstituted and by October, 1919, a temporary Belgrade-Zemun bridge spanned the Save River. Inasmuch as the railroads in the former Austro-Hungarian Provinces converged, as a rule, upon Budapest or Vienna, they did not adequately answer the needs of the new Kingdom,

which required lines running from east to west, linking up the Adriatic ports with Belgrade and the other commercial centers and providing better intercommunication between the Provinces.

PRINCIPAL RAILWAY LINES

The main lines which form a nucleus of the Serbo-Croat-Slovene railway system are as follows:

1. Trieste–Ljubljana–Zagreb–Brod–Vinkovci–Belgrade–Niš (Nish).
2. Niš–Sofia–Constantinople.
3. Niš–Saloniki–Athens.
4. Vinkovci–Subotica–Budapest.
5. Belgrade–Novi Sad–Subotica–Budapest.
6. Fiume–Zagreb–Koprivnica–Budapest.
7. Zidani Most–Maribor–Vienna.
8. Zagreb-Split–Šibenik.

In addition to the main trunk lines, there are, north of the Save River, a considerable number of secondary standard-gauge railways, running mainly east and west, which during the period of Austro-Hungarian control were of only local importance and served as feeders to the main lines converging on Vienna and Budapest. Under the new régime these lines will be of considerable importance in developing the east-west railway system, but as they are not interconnected, and as the roadbeds and rails are light, a great deal of work remains to be done before they can take their proper place as primary lines.

The principal narrow-gauge system in the Kingdom is in Bosnia, running from Brod through Sarajevo, Mostar, and Dubrovnik (Ragusa) to Zelenika on the Bay of Kotor. There is an important branch of this line connecting Sarajevo with Vardište near the Serbian frontier. Between Sarajevo and Mostar the railroad crosses Mt. Ivan by a rack-and-pinion system which is unable to handle more than 500,000 net tons of traffic annually toward the sea.

In addition to this narrow-gauge system, there are two other important narrow-gauge lines in Bosnia which tap the forest lands of that Province. The longer of these lines runs from Jajce to Knin, with a branch line from Uvala to Prijedor on the Sunja-Banja Luka standard-gauge line. This railway, which comprises 337 kilometers, was sequestered by the Government in 1918 but has since been leased to a private company. The other line, which runs from Zavidovići on the Brod-Sarajevo narrow-gauge railway to Han Pjesak, a distance of 114 kilometers, is owned by the State but is being privately operated under lease.

RAILWAY CONSTRUCTION

Once the railway lines in Serbia had been rebuilt, the Ministry of Communication turned its attention to working out such a plan of railroad construction as would best suit the economic needs of the country. These plans called for the building of 7,108 kilometers of standard-gauge lines and 2,351 kilometers of 76-centimeter-gauge lines.

Those which were considered most urgent were at once started and by January, 1926, 480.51 kilometers of standard-gauge lines and 272.59 kilometers of narrow-gauge lines had been completed.

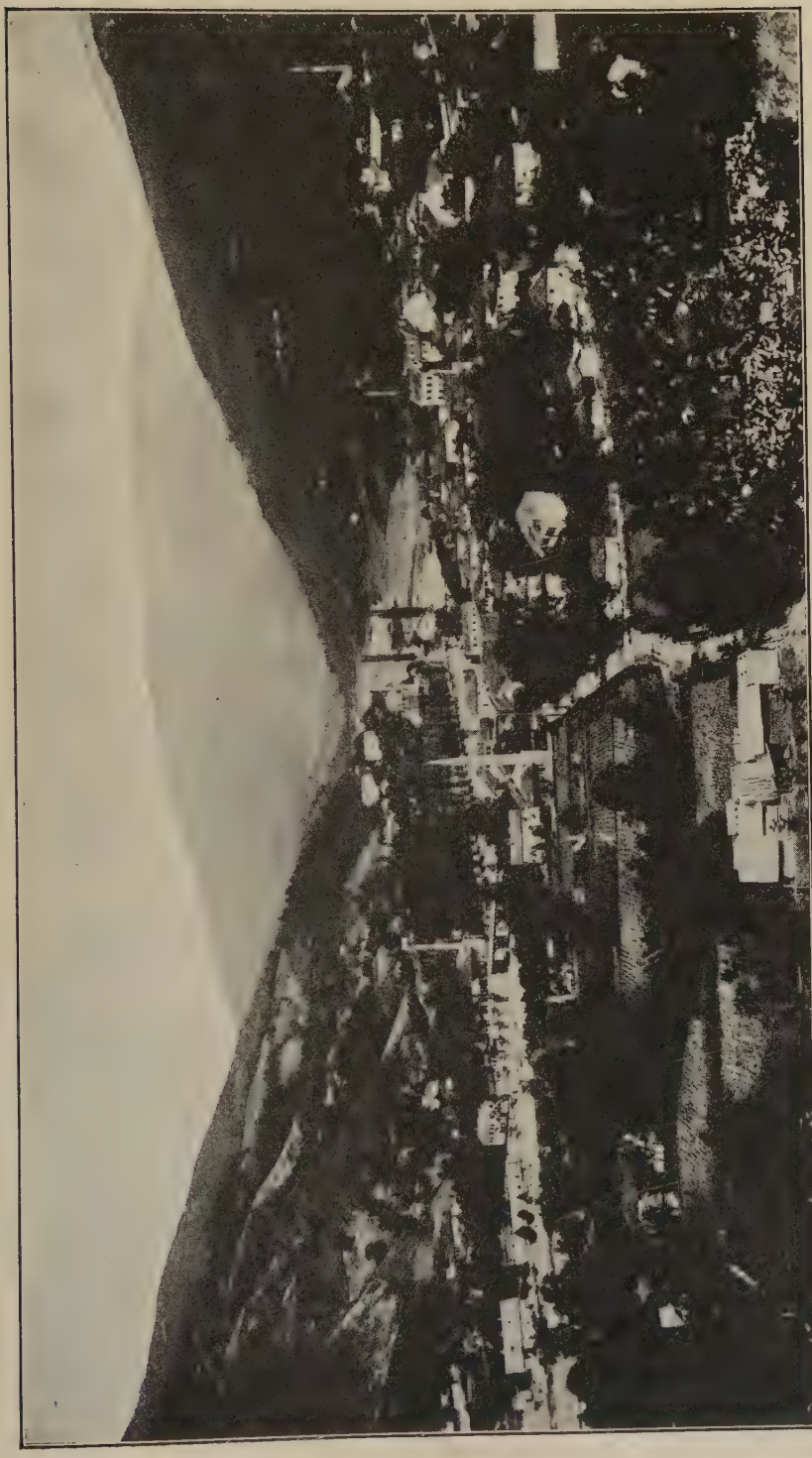

FIG. 8.—View of Mostar, Herzegovina

The following tables show the roads constructed since the war:

	Kilometers
Standard gauge:	
Vrhovine–Gračac	93. 00
Topčider–Belgrade–Mala Krsna–Pozarevac	82. 24
Niš–Knjaževac	66. 00
Ormož–Murska Sobota	37. 50
Veles–Štip	53. 00
Bihać–Krupa	33. 20
Gračac–Knin	67. 00
Titel–Orlovat	27. 50
Niš–Prokuplje	21. 07
Total standard gauge	480. 51
76-centimeter gauge:	
Gornji Milanovac–Ugrinovci	25. 00
Rača–Ugljevik	30. 55
Užice–Vardište	56. 30
Paraćin–Stalać	20. 60
60-centimeter gauge:	
Kičevo–Ohrid	82. 00
Podmolje–Struga–Tašmorunište	23. 00
Bela Vodice–Prilep	35. 14
Total narrow gauge	272. 59

Obviously the work actually completed or under way forms a very small part of the building program. On the other hand, the lines constructed are of very great importance and represent a much larger factor in the railroad development of the country than the kilometrage indicates.

The building of the narrow gauge lines Vardište-Užice and Stalać-Paraćin opens direct communication between Zaječar, on the Bulgarian frontier, and the Adriatic ports of Gruž (Gravosa) and Zelenika.

In pre-war days a short standard-gauge branch line ran from near Ogulin on the Fiume-Zagreb trunk line to Vrhovine, and a project existed for the extension of this line to connect with the existing Knin-Split and Knin-Šibenik standard-gauge lines. The construction of the Vrhovine-Knin sector has been completed and was opened for traffic during 1925.

Another standard-gauge line running from Sunja on the main trunk line (midway between Zagreb and Brod) to Bosanska Krupa had been built prior to the war. The extension of this line (Una River line) to Zrmanja, a point on the Gračac-Knin line, was immediately undertaken and has been completed as far as Bihać. The remainder will be built as soon as funds are available for the pupose. This railroad, when completed, will have considerable economic importance, as it passes through a region rich in lumber and minerals. It will be a prime factor in the development of the ports of Split and Šibenik, since shipments from the Zagreb region and the grain country north of the Save River can be sent to these ports without using a part of the Zagreb-Fiume line, as is necessary in the case of the Ogulin-Knin-Split-Šibenik railway.

From Bosanski Novi on the Una River line, a standard-gauge branch runs eastward to Banja Luka; it is proposed ultimately to extend this southward to Jajce.

The construction of the Titel-Orlovat line is actually completed with the exception of the bridge over the Tisza River at Titel. This line is of great importance, as it furnishes direct transportation from the eastern regions of the Voivodina to Novi Sad. The Niš-Prokuplje line is the first sector of the Niš-Pristina railway (about 120 kilometers long), which when completed will result in a direct line from Belgrade to Pristina. At the present time the inhabitants of the latter region are obliged to travel 112 kilometers south to Skoplje and thence 208 kilometers north to Niš.

PROJECTED RAILWAY CONSTRUCTION

The surveys and preliminary work of the tunneling of Mt. Ivan in the Sarajevo-Mostar sector of the 76-centimeter gauge line have been completed, and excavations have already been started. The railway now crosses the mountain by means of a rack-and-pinion system having a grade of 6 per cent. The tunnel which will reduce the grade to 1.5 per cent on the northern slope will not only double the traffic but reduce the operating costs.

The construction of the 32-kilometer 76-centimeter-gauge track between Belgrade and Obrenovac is about to be undertaken.

The 1926–1927 budget carries provisions for the construction of a number of new lines upon which work should commence at an early date. These proposed new lines are as follows:

LINES WHICH ARE TO BE STARTED

		Kilometers
Kragujevac–Kraljevo	standard gauge	57
Krapina–Rogatec	do	16
Prokuplje–Priština	do	93
Aleksinac–Soko Banja	do	35
Bakar Station–Bakar Port–Kraljevica	do	16
Uvac–Priboj	76-centimeter gauge	5
Trebinje–Bilec–Nikšić	do	110

LINES ALREADY UNDER CONSTRUCTION

Štip–Kočane[14]	standard gauge	34
Klarija–Srbsk–Crna	76-centimeter gauge	8
Belgrade–Obrenovac	do	39
Sl. Raca–Sava	standard gauge	2
Pazarič–Konjic–Mt. Ivan	76-centimeter gauge	38

The credits actually opened total 68,000,000 dinars, which will be supplemented in later budgets as the construction proceeds.

The construction of a direct standard-gauge line from Belgrade to an Adriatic port is generally recognized as the greatest need of the Kingdom. Plans for such a railroad have been drawn, surveys have been made, and in 1922 a contract was signed for an external 8 per cent gold loan of $100,000,000 for this purpose, of which $15,250,000[14a] has already been floated in New York. The actual route has not yet been decided on, while the flotation of the rest of the loan has met with some difficulties which have retarded the undertaking.

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[14] Reported open for traffic at end of September, 1926.

[14a] Since this report was written, an agreement has been reached, and an additional advance on the loan has been obtained in the United States.

RAILWAYS ACQUIRED BY THE STATE

In the former Turkish Provinces, which now form South Serbia and which were ceded to the Kingdom of Serbia as a result of the Balkan wars of 1912–1913, the railroad running from Guevgueli to Ristovac, where it linked up with the Serbian State Railways, and the branch line running from Skoplje to Mitrovica, belonged to the Chemins de Fer Orientaux, by virtue of a concession granted by the Turkish Government. This railway, which has a total length of 285.54 kilometers, was purchased by the Serbo-Croat-Slovene Government on July 15, 1923, for the sum of 116,120,022 French francs, and since that time has been under the sole direction of the Ministry of Communications.

On September 1, 1923, the Government took over the Südbahn railway lines on its territory. This was done by virtue of an agreement between the company and the Succession States traversed by the Südbahn lines, and entailed the payment by the Kingdom of an annuity based on the receipts of the railroads taken over, the minimum payment being fixed at 5,020,000 gold francs. The receipts of the railroads which thus came under the control of the Serbo-Croat-Slovene Government are more than sufficient to meet the annuity charges. The new acquisition totaled 531 kilometers and connected Zagreb, Ljubljana, and Maribor in the Kingdom with Trieste and Vienna.

TOTAL LENGTH OF RAILWAY LINES

The length of railway lines in the Kingdom on January 1, 1926, totaled 10,011 kilometers. The following table shows the kilometrage by gauges, by ownership, and by management:

Classes	Normal gauge	Narrow gauge			Total
		0.76 centimeter	0.60 centimeter	1 meter	
State-owned:					
State-operated—	*Kilometers*	*Kilometers*	*Kilometers*	*Kilometers*	*Kilometers*
Main	2,232.0				2,232.0
Local	1,177.5	1,762.9	503.5		3,443.9
Privately operated		462.1	42.4		504.5
Privately owned:					
State-operated—					
Main	530.8				530.8
Local	2,800.2	107.8			2,908.0
Privately operated	16.2	192.4		183.5	392.1
Total	6,756.7	2,525.2	545.9	183.5	10,011.3

The State-operated lines are all under the direction of the Ministry of Communications, with the exception of 40.4 kilometers of 76-centimeter-gauge State-owned railways which are operated by the Ministry of Forests and 21 kilometers of 60-centimeter-gauge State-owned lines which are operated by the Ministry of War. Included in the table above is the short standard-gauge railway of 16.2 kilometers, running south from Bitolj to the Greek frontier, which is owned and operated by the Greek Government.

The only double track in the Kingdom in actual use is the main line running fron the Italian frontier through Ljubljana, Zidani Most,

and Maribor to the Austrian frontier. The only other double-track line in the Kingdom is between Vinkovci and Dalj, but the second tracks on this line are used as sidings. Under the Hungarian régime the construction of double-track lines was prohibited in those provinces which are now a part of this Kingdom.

The laying of a second track on the Zagreb-Belgrade line has already started, and estimates have been prepared for similar work on the Belgrade-Niš (Nish) sector of the trunk line to Saloniki.

RAILWAY MANAGEMENT

The supervision and control of the railways in the Kingdom is under the Ministry of Communications. The railway lines in the Kingdom are divided into five divisions, with headquarters at Belgrade, Zagreb, Subotica, Sarajevo, and Ljubljana. The number of kilometers in the territory of each division is as follows:

Belgrade	3,057.1
Zagreb	2,307.7
Subotica	1,972.8
Sarajevo	1,538.8
Ljubljana	1,134.9
Total	10,011.3

ROLLING STOCK

The rolling stock of the railroads of the Kingdom (with the exception of the Südbahn lines) was, on March 10, 1925, as follows:

Rolling stock	In service	Under repair	Others
Locomotives:			
Normal gauge	1,177	939	12
Narrow gauge	421	288	----------
Passenger cars:			
Normal gauge	1,428	1,041	----------
Narrow gauge	335	107	----------
Freight cars:			
Normal gauge	27,706	16,724	----------
Narrow gauge	5,806	2,107	----------

On the Südbahn railway lines taken over by the Serbo-Croat-Slovene Kingdom, the rolling stock, on March 24, 1925, was as follows:

Rolling stock	In service	Under repair
Locomotives, normal gauge	172	56
Passenger cars, normal gauge	471	----------
Freight cars, normal gauge	3,464	----------

The Kingdom has received from Germany, on account of reparations, 10,345 freight cars, 450 locomotives, 240 normal-gauge passenger cars, and 16 narrow-gauge passenger cars. It is expected that additional railway equipment will be secured on account of reparations.

METHOD OF PURCHASE OF RAILWAY SUPPLIES

The purchase of railway equipment of all kinds is made by adjudications. The machine department ("mashinske odelenje") informs the general directorate of the equipment required, and the latter

notifies the purchasing department ("ekonomsko odelenje"), which publishes in the Official Journal ("Sluzbene Novine") a call for bids. All bids must be accompanied by the deposit of a guaranty either in cash or State bonds, such guaranty being 10 per cent of the amount of the bid in the case of domestic concerns and 20 per cent in the case of foreign firms. Purchases up to 400,000 dinars ($1 = 56 dinars at current (1926) rate of exchange) must be approved by the Minister of Communications; up to 2,000,000 dinars by the Ministerial Financial Commission, and in excess of 2,000,000 dinars by the Ministerial Council.

However, there is little chance of any equipment being purchased so long as there is hope of receiving such supplies from Germany on account of reparations.

REPAIR SHOPS

Railway repair shops are maintained at Niš (Nish), Veles, and Smederevo for the Belgrade division; at Subotica and Veliki Bečkerek for the Subotica division; at Brod and Zagreb for the Zagreb division; at Ljubljana and Maribor for the Ljubljana division (Südbahn Railways); and at Sarajevo for the Bosnia narrow-gauge division. As the capacity of these shops is unequal to the demands for repairs, the railway administration has in the past made contracts with Hungarian, Czecheslovak, and Austrian firms for the renovation of locomotives, coaches, and cars.

In 1923 the Ministry of Communications believed that the increased facilities of the domestic railway repair shops could meet all the demands for repairs to the rolling stock and accordingly discontinued contracts with private concerns for such work. These facilities have, however, since been found inadequate, and, with the quantity of rolling stock laid up for repairs increasing, it appears likely that a number of contracts for repairs must again be let out to private concerns.

At the present time it is estimated that, for the repair and maintenance of locomotives, 4,000 skilled workmen are necessary, whereas only 1,400 workers of this type are now employed. For the maintenance and repair of freight cars, 3,000 skilled workmen are required, or 800 more than the number now in service. There is consequently urgent need for the construction of one additional repair shop for standard-gauge locomotives, to employ 2,000 workmen, and one repair shop for narrow-gauge locomotives, to employ 1,000 workmen.

For the narrow-gauge rolling stock, the workshops at Sarajevo are able under present conditions to make all the necessary repairs, but with the extension of the narrow-gauge system, especially on the territory of the former Kingdom of Serbia, an additional workshop for the repair of narrow-gauge rolling stock will become necessary within five years.

The State railways have received from Germany, on account of reparations, equipment for two complete repair shops, one for normal-gauge freight cars and the other for normal-gauge locomotives. This equipment was received some time ago but has not yet been installed, as no decision has been reached as to where these shops will be erected, but it appears probable that they will be built either at Kruševac or at Kraljevo.

RAILWAY TRAFFIC

The railway traffic in the Kingdom is steadily increasing. The number of trains on the State Railways in 1919 totaled 160,144, as compared with 482,230 trains in 1922 and 556,567 trains in 1923. In 1922 the average number of kilometers traveled by each train was 56.3, as compared with 64.6 in 1923. These figures show conclusively what great strides have been made in increasing transportation facilities. The statistics for the Südbahn railway lines in the Kingdom (which are not included in the above figures) give 73,720 trains in 1922, averaging 99.1 kilometers per train, and 86,757 trains in 1923, averaging 78.8 kilometers per train.

The transshipments at Brod between the Bosnian narrow-gauge railway system and the standard-gauge trunk line Zagreb-Belgrade have steadily increased since 1919 and far exceed the pre-war maximum of 40,000 freight cars annually. The statistics of such transshipments since 1919 are as follows:

Years	Annually	Daily
	Cars	*Cars*
1919	32,712	89
1920	46,777	128
1921	53,488	146
1922	69,213	189
1923	97,540	267
1924	94,087	258

No recent figures are available for the railway passenger traffic in the Kingdom, but the following table gives the passenger-kilometrage during 1922 and 1923 on all of the divisions except the one at Ljubljana:

Classes	Passenger-kilometrage	
	1922	1923
First	16.5	13.9
Second	287.3	259.3
Third	3,306.9	3,627.6
Fourth	352.7	290.9

RAILWAY FINANCES

From June 1, 1919, to June 1, 1921, the expenditures of the railways exceeded the receipts, but from the latter date until 1926 the receipts have regularly exceeded expenditures. Even in 1921 the receipts for the second half-year were sufficiently large to overcome the deficit of the first semester and the year closed with a surplus of 146,530,000 dinars. In 1925, there was a deficit of 282,107,514 dinars.

The following table shows the receipts and expenditures from June 1, 1919, to December 31, 1925:

Calendar years	Receipts	Expenditures	Balance
	Dinars	*Dinars*	*Dinars*
1919 [1]	68, 375, 000	122, 075, 000	−53, 700, 000
1920	371, 323, 900	462, 925, 000	−91, 601, 100
1921	884, 530, 000	738, 000, 000	146, 530, 000
1922	1, 267, 318, 619	1, 033, 264, 032	234, 054, 587
1923	1, 879, 967, 302	1, 205. 377, 621	674, 589, 681
1924	2, 487, 004, 182	1, 771, 052, 509	715, 951, 673
1925	2, 566, 971, 247	2, 849, 078, 761	−282, 107, 514

[1] From June 1, 1919, to Dec. 31, 1919, only.

Railway receipts approximate 20 per cent of the entire Government income. The 1926–27 budget authorized the expenditure of 2,445,-564,079 dinars for railways and estimated railway receipts at 2,850,-000,000 dinars. The financial law stipulates that, should the receipts exceed the expenditures by more than the amount provided for in the budget, then such surplus can be employed for productive purposes such as the purchase of equipment and the construction of lines.

Since 1919, railway construction has been carried on with 455,000,-000 dinars from the 500,000,000 dinar internal 7 per cent loan of 1921, with 359,000,000 dinars from the 8 per cent external gold loan of 1922, and with normal railway receipts.

FREIGHT RATES

Freight rates are based on weight, with the exception of the rates for livestock, which in some cases are based on the floor space occupied. In order to counteract the great variance in the size of shipments of the same weight for various articles and to permit an equitable assessment of freight charges, a classification of the various commodities has been made which takes into consideration the relation of weight to size. The rates vary again according to whether the shipment is less than 5,000 kilos or more than 5,000 kilos or more than 10,000 kilos. Shipments pay according to distance, the rates decreasing as the distance increases. The rates are charged on 10 kilometers or multiples of 10 kilometers, so that for 101 kilometers the rate for 110 kilometers is assessed. The rates are subject to change by Government order.

PASSENGER RATES

The passenger rates on trains are as follows:

Classes	For 10 kilometers or fraction thereof	
	On express trains	On local trains
	Dinars	*Dinars*
First	14. 00	10. 50
Second	10. 50	7. 00
Third	7. 00	3. 50

Tickets are sold on express trains only for 50 kilometers or more and on local trains for 10 kilometers or more.

AUTOMOBILE SERVICES SUPPLEMENTING RAILWAY COMMUNICATIONS

In order to supplement the railway service, the Ministry of Posts and Telegraphs has established permanent automobile communications between a number of towns for the transport of mail, passengers, and baggage. During 1925, such services were operated with more than 150 automobiles over 39 routes totaling 2,147 kilometers.

In 1925, the automobiles engaged in these services traveled 1,320,557 kilometers, transporting 116,270 persons and 1,664,195 kilos of baggage.

There are also a number of automobile services in Montenegro, but these are under the direction of the Ministry of Communications.

RIVER NAVIGATION

The Kingdom is served by an admirable network of navigable rivers which, if developed to their fullest capacity, would furnish a very high proportion of the transportation needs of the country. Even in their present state of development they afford a very appreciable communication asset. The importance of such navigation is apparent from the following table showing the percentage of the total foreign trade handled by the river-navigation service:

Items	1923	1924
	Per cent	*Per cent*
Exports	6.3	9.0
Imports	20.0	19.5
Total foreign trade	10.0	11.4

NAVIGABLE RIVERS

The total navigable length of the rivers of the Kingdom is estimated at 3,000 kilometers. The following table shows the navigable rivers, their total length and navigable length:

Rivers	Province	Total length	Navigable length
		Kilometers	*Kilometers*
Bosna	Bosnia	308	155
Bosut	do	186	40
Danube	Voivodina	[1] 475	475
Drave	Slovenia	[1] 406	150
Drina	Bosnia	460	333
Ibar	Serbia	241	208
Krka	Dalmatia	75	50
Kupa	Croatia-Slavonia	296	136
Lim	Montenegro and Serbia	220	168
Morava (southern)	Serbia	299	86
Mura	Slovenia	129	50
Neretva	Herzegovina	218	105
Piva	Montenegro	87	20
Save	Slovenia, Croatia-Slavonia, Bosnia, Serbia	905	594
Tara	Montenegro	140	55
Temos	Voivodina		4
Theiss (Tisza)	do	[1] 207	207
Una	Bosnia	256	70
Vrbas	do	240	78
Zrmania	Dalmatia	54	14

[1] Length within the Kingdom.

Only 1,384 kilometers of river ways are utilized for cargo traffic and 1,017 kilometers for passenger services. The Danube, an international river, which is navigable throughout its entire length within the Kingdom, furnishes 475 kilometers for both freight and passenger service, while the remaining traffic is all handled on the territorial waters of the tributaries of the Danube.

Freight traffic on the Save River operates as far as Zagreb, a distance of 593 kilometers, while the passenger and mixed-traffic service goes only to Bosanski Brod, a distance of 373 kilometers.

On the Drave, cargo boats ply to Nočjovac, a distance of 109 kilometers, while the passenger and mixed traffic has its terminal at Osijek, a distance of 95 kilometers from the Danube.

On the Tisza regular passenger and mixed-traffic services are carried on as far as Srpska Krstura, a distance of 150 kilometers, but the freight service continues to the Hungarian frontier, a distance of 206.9 kilometers.

The Save, Drave, and Tisza Rivers are primarily feeders for the Danube navigation services, although the traffic between points on the Save River is important and of great local value.

NAVIGATION SEASON

The navigation season usually opens on April 1 and closes on December 1, but these dates are subject to change, as navigation during the early and closing days of the season is frequently interrupted by ice and high or low water.

INTERNAL TRAFFIC RESERVED FOR NATIONAL VESSELS

The Kingdom reserves to boats flying its own flag all navigation services on the territorial waters of the State, as well as traffic between river and canal ports within the national frontiers. Foreign barges may enter the country, but they must be towed from the frontier to their destination, within the Kingdom, by domestic steamers or tugs.

COMPANIES OPERATING

Companies which maintain navigation services on the rivers of the Kingdom are the Donau Dampfer Schiffarts-Gesellschaft (a German concern), the Brodarski Syndicate, a domestic organization, and a number of small local companies. The "D. D. S. G." steamers ply twice weekly in each direction between Vienna and Giurgiu, Rumania, via Belgrade, and carry both freight and passengers.

The Brodarski Syndicate operates the following passenger and freight services:

Belgrade–Radujevac: Twice a week.
Belgrade–Dubravica–V. Gradište–Golubac: Four times a week.
Belgrade–Novi Sad–Osijek (Drave): Three times a week.
Belgrade–Titel–St. Bečej–Senta (Tisza): Three times a week.
Veliki Bečkerek (Begej Canal)–Titel (Tisza)–Slankamen: Once a day.
Vukovar–Novi Sad: Six times a week.
Zemun–Belgrade–Pančevo: Several times a day.
Belgrade–Zemun: About every 20 minutes.
Belgrade–Pančevo–Smederevo: Once a day.
Belgrade–Titel (Tisza)–Veliki Bečkerek (Begej Canal)–Sr. Krstura (Tisza)–Osijek (Drave)–Bezdan: Once a week.

The small local companies maintain only freight service of irregular frequency.

THE BRODARSKI SYNDICATE

The Brodarski Syndicate, which is the only important domestic concern engaged in river navigation within the Kingdom, has existed since 1921, by virtue of an agreement between the Ministry of Communications and the Royal Serbian Privileged Steamship Co., a private concern, whereby the floating stock owned by the Government is turned over to the Royal Serbian Privileged Steamship Co. for operation. This floating stock is considered as representing 82.5 per cent of the total capital of the syndicate, while the total assets of the subsidiary company represent the remaining 17.5 per cent. The Government also holds one-third of the stock of the Royal Serbian Steamship Co., making its total interest in the Syndicate 88.33 per cent. The State, represented by the Ministry of Communications, receives 82.5 per cent of the total net profits and the Royal Serbian Privileged Steamship Co. 17.5 per cent.

Toward the close of 1925 disagreements which had been evident for a number of years between the syndicate and the Ministry of Communications came to a climax and resulted in the decision of the Government to withdraw from the syndicate and to operate its own boats. A project of law was drawn up to legalize this proposed activity of the Government and was submitted to Parliament.[15]

FORMATION OF "RIVER NAVIGATION"

On April 5, 1926, an order was issued founding the "Direction of River Navigation of the Kingdom of the Serbs, Croats, and Slovenes," a Government institution operating under the supervision and direction of the Ministry of Communications. According to the regulations governing this new organization, issued on May 23, 1926, all of the Government-owned vessels on the rivers and canals of the Kingdom are turned over to this new "Direction" for operation. The regulations provide for a director and an advisory board. The advisory board, which must be consulted in all matters of importance, has no real administrative authority. This board consists largely of members of the "Direction" and of the Ministry of Communications, the commercial and industrial elements of the country being represented by one exporter, one importer, and a delegation from the Chamber of Commerce of Belgrade.

The "River Navigation" service is charged with the maintenance of navigation on all the internal waterways of the Kingdom and is authorized to undertake all matters looking to the development and improvement of river and canal transportation. The expenditures must be estimated in advance each year for incorporation in the budget law. The regulations stipulate that the annual balance sheet and the annual profit and loss account must be prepared by the end of April at the latest. Among the provisions of the regulations is a requirement for an amortization fund which is to serve exclusively for the purchase and repair of the floating stock. Although this new river navigation service is said to be autonomous, nevertheless it is controlled in all important matters by the Ministry of Communications and must look to the State Treasury for its credits.

[15] This syndicate was dissolved on January 1, 1926. The floating stock which belonged to the Government was returned to the Ministry of Communications, while that belonging to the Royal Serbian Privileged Co. was put into operation by that company.

RIVER FLEET

The river fleet flying the flag of the Kingdom of the Serbs, Croats, and Slovenes comprised in 1924:

Classes	Brodarski Syndicate	Other companies	Total
Steamers:			
Number	24	13	37
Horsepower	8,695	1,065	9,760
Tugs:			
Number	59	35	94
Horsepower	26,623	7,620	32,243
Barges:			
Number	520	374	894
Tonnage	320,969	127,660	448,629
Tank steamers:			
Number	31	3	34
Tonnage	24,752	2,098	26,850

The fleet flying the Serbo-Croat-Slovene flag is the largest on the Danube River.

TYPE OF VESSELS

The steamers serving this section of the Danube are as a rule of the paddle-wheel type having a draft of from 1.6 meters to 1.7 meters and rarely exceeding 1,000 horsepower per vessel. The barges are round-bottomed; they have a draft of from 1.9 to 2.1 meters and a cargo capacity of from 650 to 700 tons. Tugboats vary considerably as to both draft and motive force, the latter factor varying from 250 to 1,400 horsepower.

TRAFFIC STATISTICS

The total number of passengers carried is not ascertainable, but the figures supplied by the Brodarski Syndicate for their own services show that in 1924 their vessels transported 2,731,732 passengers, as follows:

Belgrade-Zemun-Belgrade line	1,393,989
Belgrade-Pančevo-Belgrade line	592,025
Other lines	745,718
Total	2,731,732

The company's traffic totaled 56,546,000 passenger-kilometers during 1924.

During 1924, the Danube freight traffic of the Kingdom totaled 1,589,839 metric tons, of which 1,016,183 tons were for internal trade, 353,296 tons for exports, and 220,360 tons for imports. Of the total traffic, 1,285,557 tons was carried by domestic vessels.

In addition to the Danube traffic, there is a considerable amount of freight handled between points on the Danube tributaries—for which no statistics are available. However, the Brodarski Syndicate reports that during 1924 it handled 196,330 tons of barge freight on the Save River and 163,510 tons of such traffic on the Drave and Tisza Rivers and the Begej Canal. The company's freight traffic totaled during that year 345,402,745 ton-kilometers.

CARGOES: TYPE AND DISTRIBUTION

The cargoes handled by the Danube steamers and barges comprise for the most part firewood, cereals, and coal. Of the 665,480 metric tons of barge freight transported by the Brodarski Syndicate in 1924, firewood furnished 30.7 per cent, cereals 30.3 per cent, and coal 18.7 per cent.

The distribution of the barge freight handled during the same year by the syndicate was as follows:

	Per cent
Internal traffic	55. 4
Exports to Upper Danube States	20. 4
Exports to Lower Danube States	6. 1
Imports from Upper Danube States	5. 4
Imports from Lower Danube States	7. 3
Transit, etc	5. 4
	100. 0

The transportation of cereals during 1924 amounted to only 201,590 metric tons, whereas the exports of this commodity during the same year totaled 527,194 metric tons. Since the river services traverse all the important grain-growing regions of the Kingdom, water transportation should be able to handle not only practically all of the exports but also a great volume of the grain distributed within the Kingdom.

PORTS ON THE DANUBE

The principal domestic Danube ports are Vukovar, Novi Sad, Pančevo, Zemun, Belgrade, Smederevo, and Radujevac. Technically Pančevo is on the Temos River, 4 kilometers distant from the Danube, while Belgrade fronts on both the Danube and Save Rivers, but only a small section of the quays are on the former. Thus both ports are on the territorial waters of the Kingdom and may be entirely reserved to domestic vessels. The leading ports on the Save River are Belgrade, Šabac, Sisak, and Zagreb, while Osijek is the only port of importance on the Drave. On the Tisza River the principal ports are Titel, Stari Bečej, Senta, and Srpska Krstura.

In general, the port installations are inadequate and access to the shore is across pontoons anchored at the water's edge. There are only 51 such pontoons in the Kingdom. Lack of budgetary means has prevented the State from providing sufficient modern facilities and equipment, and, as the policy of the Government is to own and operate all of the port installations, private initiative has not been able to play its role in the development of the port facilities.

Belgrade is by far the most important river port in the Kingdom, as is evidenced by the following figures:

TRAFFIC OF PRINCIPAL PORTS IN 1924

Ports	Outbound	Inbound	Total
	Tons	*Tons*	*Tons*
Vukovar	9,467	152,326	161,793
Novi Sad	15,100	113,870	128,970
Pančevo	50,119	94,433	144,552
Belgrade	13,703	432,145	445,848

FIG. 9.—Port of Belgrade

It is interesting to note that practically all of the Belgrade traffic is inbound. The increasing importance of Belgrade as a port may be seen from the fact that in 1911 the total traffic amounted to only 265,000 tons.

The Belgrade quays, which have a total length of 8,000 meters, are equipped with railway sidings and four steam cranes of 4 tons capacity each. The customs warehouses have storage space for 1,150 metric tons of goods, while private warehouses in the city are able to supply space for 22,000 metric tons of freight.

WINTER PORTS

The following table shows the winter ports in the Kingdom, as well as the number of vessels they are able to shelter:

Bezdan	105
Osijek (Drave)	37
Novi Sad	72
Belgrade	425
Pančevo	180
Total	819

SHIPYARDS AND DREDGES

There are shipyards on the Danube at Belgrade, Zemun, and Smederevo, all of which are fairly busy. The one at Belgrade, which belongs to the Brodarski Syndicate, has a floating workshop but no ways. It is only equipped to effect ordinary repairs to hull and machinery. The shipyard at Zemun has neither ways nor floating workshop and can only make ordinary repairs to hull and machinery. The Smederevo plant is the largest in the Kingdom. Its installation is capable of building hulls, installing engines, and doing heavy repairs.

A large part of the ship-repair work is done at Ratisbon, Germany.

The Kingdom possesses five dredges having a capacity of 720 cubic meters per hour and four having an hourly capacity of 90 cubic meters. All of them are in poor condition.

FORMALITIES AND DUES

Bills of health, the fee for which is 27 dinars, are obligatory for all vessels entering the Kingdom. There is no charge for customs examination during office hours, but a small fee is collected for such services rendered after office hours.

The port dues are as follows:

	Dinars
Steamers:	
First and second journeys	650
Third and further journeys	400
Barges:	
First and second journeys	600
Third and further journeys	250

Foreign vessels entering territorial waters pay double the regular rates.

CANAL TRANSPORTATION

In addition to the natural waterways there are three important canals (King Peter, King Alexander, and Begej Canals) in the Kingdom. These are all in the Voivodina, and, as they traverse the rich

grain fields of the Danube Basin, are valuable feeders to the river navigation services. On account of lack of equipment their maximum traffic capacity is not utilized.

KING PETER AND KING ALEXANDER CANALS

These two canals are operated by the King Peter and King Alexander Canal Co.

The King Peter Canal runs from the Danube River at Bezdan, near the Hungarian frontier, to Turski Bečej on the Tisza River, a distance of 123 kilometers. The King Alexander Canal branches from the King Peter Canal at Mali Stapar and enters the Danube River at Novi Sad after a course of 70 kilometers. The King Peter Canal is equipped with five locks and the King Alexander Canal with four locks. The depth of these canals varies from 1.55 to 1.70 meters, while the width of the beds is about 77 meters. The locks vary in length from 42.60 to 70 meters and in breadth from 8.42 meters to 13.96 meters.

FLOATING STOCK

The floating stock of the King Peter and King Alexander Canal Co. consists of three steamers with a total capacity of 57 tons; one dredge and one motor-boat. The canal company owns no barges but uses those belonging to the Brodarski Syndicate.

TRAFFIC

The total traffic of these canals in 1924 amounted to 136,054 metric tons, of which 115,108 metric tons was inbound and 20,946 metric tons was outbound.

BEGEJ CANAL

The Begej Canal links Veliki Bečkerek with Temesvar, Rumania. The length of the canal between Veliki Bečkerek and the Rumanian frontier is 88 kilometers. This canal has four locks within the Kingdom. The depth varies from 1.50 meters to 3 meters; the breadth is 12 meters, and the locks are from 69 meters to 73 meters in length and 10 meters in width. The service is maintained by the boats of the Brodarski Syndicate which navigate only as far as Srpski Itebej, 79 kilometers east of Veliki Bečkerek.

PROJECTED CANALS

Engineers have drawn plans for the construction of three canals, as follows:

VUKOVAR-ŠAMAC CANAL

It is proposed to construct, some time in the future, a canal with two locks between Vukovar, on the Danube, and Šamac, on the Save River at its junction with the Bosna River, a distance of 56.5 kilometers. The building of this canal would reduce the distance by water between the upper Danube and the upper Save by approximately 420 kilometers.

DANUBE-ADRIATIC CANAL

It is also proposed to construct a canal from Karlovac on the Kupa River in Croatia to the Adriatic coast. The first section of this canal would be formed by the canalization of the Kupa River as far as

Velikia Kapela, after which there will be a navigable tunnel, 24 kilometers in length, to the Adriatic coast. This projected canal would be equipped with 11 locks, and would result in direct water communications between the Black Sea, the Danube, the Save River, and the Adriatic Sea.

MORAVA-VARDAR CANAL

It is also desired to construct a Morava-Vardar canal which would be formed by the canalization of the Morava and Vardar Rivers and by the construction of a canal linking these two rivers, which would require 104 locks and would have a total length of 640 kilometers. The realization of this plan would furnish direct water transportation between the Danube and Saloniki.

None of these projects is expected to materialize within the near future, but they indicate clearly that the engineers of the country are alive to the importance of the development of a proper system of waterway communications.

HIGHWAYS AND PUBLIC ROADS

The Ministry of Public Works is charged with the construction, supervision, and control of all public roads and the maintenance of the national highways. The roads of the Kingdom have not yet been organized into a uniform system, but this is expected to be done as soon as the Government is able to dispose of sufficient funds to draw up a complete road plan.

CLASSIFICATION OF PUBLIC ROADS

The public roads of the Kingdom are divided into:

1. Naticnal highways.
2. District (oblastni) roads, first class.
3. District (oblastni) roads, second class.
4. Municipal roads, first class.
5. Municipal roads, second class.
6. Mountain trails.

NATIONAL HIGHWAYS

National highways are State-constructed and State-maintained public roads. These form a complete network of roads connecting the principal centers of the Kingdom. Every Province in the Kingdom is served by such highways.

DISTRICT ROADS, FIRST CLASS

The district roads of the first class are constructed by the State but are kept in repair by the district, which is the largest political subdivision of the country. These district roads of the first class form a secondary system of roads covering the entire Kingdom. Such roads of one district connect with those of the contiguous districts. They link up the principal cities and towns of the district with those of the adjoining districts and with the national highways. Of all the geographical provinces of the Kingdom, Montenegro alone has no such roads.

DISTRICT ROADS, SECOND CLASS

District roads of the second class have only local importance and are spurs of the national highways or of district roads of the first class, connecting places of secondary importance and serving as

feeders to the larger types of public roads. They are State-built but are repaired by the district. Such roads are found only in Serbia, South Serbia, Croatia-Slavonia, and Slovenia.

MUNICIPAL ROADS

Municipal roads of both classes are similar to district roads of the second class, the only difference being that they are still more local in importance and are maintained by the municipalities which they connect. Those of the second class are of less importance than those of the first class. All are State-built. Municipal roads exist in the Voivodina, Croatia-Slavonia, and Slovenia.

MOUNTAIN BRIDLE TRAILS

This designation applies to mountain roads which are so steep that they can not be used for vehicular traffic and are limited to mounted travelers or pack animals. Public trails exist in Dalmatia and Bosnia-Herzegovina, but private trails are to be found in every mountain region.

The public trails are built and maintained by the districts which they traverse.

LENGTH OF PUBLIC ROADS

There are 44,590 kilometers of public roads in the Kingdom, distributed as follows: Serbia, 10,992 kilometers; South Serbia, 2,605; Montenegro, 823; Bosnia-Herzegovina, 6,959; Voivodina, 4,744; Dalmatia, 1,580; Croatia-Slavonia, 9,594; and Slovenia, 7,293.

WIDTH OF ROADS

The width of the roads is fixed by regulations, but variations from the specified width are frequent, owing to the difficult nature of the terrain in certain regions. The regulations provide for the following widths for the various classes of roads:

Classes	Base	Surface
	Meters	*Meters*
National highways	7 to 9.50	5 to 6
District roads, both classes	6 to 8	4.50 to 5
Municipal roads:		
First class	4.50 to 5	3 to 5
Second class	3 to 5	No limits.
Mountain bridle trails		

ROAD CONSTRUCTION

NATIONAL HIGHWAYS AND FIRST-CLASS DISTRICT ROADS

The specifications for these two classes of roads call for macadamized surfaces laid on foundations of crushed stone. The binding material is invariably sand from a neighboring river. In actual practice, there are frequent and important deviations from the specifications, in consequence of the topography of the country, the difficulty of obtaining locally the proper materials, and the difference in the economic conditions and needs of the population. Thus, mountain or river gravel very often replaces broken stone in both bed and surface construction. Again, a number of district roads and some of the national highways have been built without foundations.

The principal characteristics of the national highways and district roads of the first class in the several provinces are as follows:

In North Serbia, practically all of these roads are hard-surfaced, but a number lack foundations. The surfacing, which is usually of gravel bound with sand, is not very resistant to the constant and hard usage which the roads receive from the bullock teams and steel-tired carts of the peasantry, which form the bulk of the traffic. They are consequently in frequent need of repair and are muddy in winter and dusty and rough in summer.

In Slovenia, Croatia-Slavonia, Dalmatia, Bosnia-Herzegovina, and Montenegro all of these roads are macadamized, but a considerable number have no foundations. However, as all of these regions are more or less mountainous, the roads are frequently laid on natural stone foundations, with the result that the roads require less upkeep and are normally in good condition.

In the Voivodina (Baranja, Banat, and Bačka) all of these roads have foundations and are generally surfaced with broken stone bound with sand. When in good repair, they are excellent. The expenses of upkeep are so heavy that they are often permitted to deteriorate to such a point that they are very rough in dry weather and muddy in rainy weather.

DISTRICT ROADS OF SECOND CLASS AND MUNICIPAL ROADS

No definite specifications are observed in the construction of district roads of the second class and municipal roads, which supply only local needs and are repaired by the local authorities with materials which are readily obtainable in the region. They are very frequently dirt roads with no surfacing other than sand, cinders, or gravel. In winter weather they are practically impassable and in summer very dusty. However, as the peasants use them primarily for marketing their crops in the summer and early autumn, they amply serve the needs for which they were built.

FINANCING OF CONSTRUCTION AND REPAIR OF ROADS

As previously stated, all public roads in the Kingdom, with the exception of mountain trails, are constructed by the State, and all national highways are repaired by the central Government. District and municipal roads are repaired by the political subdivisions which they serve—frequently with the aid of State subsidies.

The national budget carries provisions for all construction work, both under way and projected, repairs and maintenance of the national highways, subsidies for district and municipal roads, as well as funds for emergencies, arising from inundations and similar misfortunes which can not be enumerated in the budget estimates.

Such budget allotments are made from the general receipts of the Government. In the tax district of Serbia, South Serbia, and Montenegro there is an accessory road tax of 2 dinars collected from each taxpayer, which yields 1,500,000 dinars annually, and in Bosnia-Herzegovina a special accessory road tax which yields 4,715,000 dinars a year. The income from both of these assessments enters the State Treasury as general receipts.

The budget for the year ended March 31, 1925, carried the following appropriations for roads. The figures include only allowances

for material and ordinary labor for roads (not including bridges). Salaries of engineering and clerical staff are not included.

	Dinars
Serbia	141, 200, 000
Montenegro	14, 360, 000
Dalmatia	8, 130, 000
Bosnia-Herzegovina	27, 107, 000
Croatia-Slavonia	14, 312, 000
Slovenia	9, 414, 000
Voivodina	8, 900, 000
Total	223, 423, 000

The State does not make use of labor contributions or "corvées" for the construction of roads or for the maintenance and repairs of highways. However, military units are employed for the building and repair of roads of strategic importance.

The districts and municipalities are obliged to provide for the upkeep and repairs of district and municipal roads of both classes. This is done from the district and municipal budgets, with such assistance as they are able to obtain from the central Government in the form of subsidies. In the 1924–25 budget, these subsidies totaled 8,412,000 dinars. Each district and each municipality collects a surtax which is supposed to be spent on road repair and maintenance but which actually increases the general district and municipal income. The allotments which are made from the districts or municipal treasury for public roads invariably exceed the receipts from these special road surtaxes.

The labor for the repair and upkeep of district and municipal roads is supplied for the most part by "corvées," and each taxpayer is obliged to contribute an amount of labor proportionate to his taxpaying capacity.

The maintenance and repair of district and municipal roads amount to 400,000,000 dinars annually, of which the "corvée" represents 50,000,000 dinars.

REPAIR OF ROADS AFTER WAR

The highways and roads in the Kingdom at the close of the World War were in a lamentable condition. This was especially true of Serbia, where practically all of the roads had been ruined and the bridges destroyed. In the beginning temporary bridges were built but these were later replaced by permanent structures. In the entire Kingdom 30,000 kilometers of roads have been repaired since the armistice at a cost of about 3,000,000,000 dinars to the national treasury and of over 500,000,000 dinars to the districts and other local units. In Serbia alone, 7,500 kilometers of roads with road bridges have been repaired, for which the State spent 1,500,000,000 dinars and the local units 200,000,000 dinars.

POSTWAR CONSTRUCTION

Since the World War, the Kingdom has directed its energies toward linking up the roads of Montenegro and Serbia with those of the former Austro-Hungarian Provinces.

The construction of roads since 1918 has been as follows:

1. From Nikšić, Montenegro, to Trebinje, Herzegovina, a distance of 34 kilometers, of which 22 kilometers have been completed and 12 kilometers are actually under construction.
2. From Vranje, South Serbia, to Bosiljgrad (to serve the district ceded by Bulgaria), 70 kilometers, entirely completed.
3. From Peć, in South Serbia, to Andrijevica, Montenegro, a distance of 84 kilometers, of which 24 kilometers are open to traffic and the remainder will be completed during the present year.
4. From Golubac to Donji Milanovac, along the Danube, 10.5 kilometers.
5. In Slovenia, 50 kilometers.
6. In Croatia-Slavonia, 20 kilometers.
7. In Montenegro, 30 kilometers, completed, and 200 kilometers under construction.
8. In Bosnia-Herzegovina, 50 kilometers, completed.
9. In Serbia, the entire reconstruction of 420 kilometers of roads has been started, of which about 200 kilometers will be completed during the current year. These roads, under reconstruction, are:

(*a*) Belgrade-Topola-Kragujevac-Kraljevo-Bačka, with a total length of 285 kilometers.
(*b*) Valjevo-Loznica, 80 kilometers.
(*c*) Užice-Zlatibor, 27 kilometers.
(*d*) Užice-Vardište, 58 kilometers.

Furthermore, about 200 kilometers of other roads have been reconstructed in Serbia since the war.

The program of road construction in Serbia calls for the rebuilding of 2,500 kilometers of roadways, in which are included the 420 kilometers mentioned above as already under construction, The remainder will be undertaken as soon as the national budget can provide the necessary credits.

New highways totaling 2,000 kilometers are included in the Government program, but definite plans have been drawn for only 750 kilometers.

ROAD-BRIDGE CONSTRUCTION

Since the war, the iron superstructure has been placed on the foundations of the four bridges on the Morava at Sviljanac, Jagodina, Čuprija, and Aleksinac.

The postwar budgets carried 70,000,000 dinars for these bridges, the combined length of which totaled 860 meters.

In addition to the above there has been completed the piling for bridges over the Morava at Varvarin (200 meters), over the Danube at Novi Sad (330 meters), over the Drina at Bajna Basta (130 meters), and at Ljubovija (210 meters), and for five other small bridges of 60 meters each. The road bridge over the Save at Šabac (700 meters) is under construction now. The outlay for these bridges to the end of 1925 amounted to 43,000,000 dinars.

The structural iron for bridge work has all been obtained from Germany on account of reparations.

GENERAL CONDITION OF ROADS

The highways and public roads of the Kingdom are being improved steadily under a very comprehensive program which has been elaborated by the Ministry of Public Works but which is only being carried out slowly by reason of the lack of budget credits for the purpose. Despite this fact, a great deal has been accomplished since the war. The roads fairly well serve the needs of the rural population whose traffic is borne in carts drawn by horses or oxen. The automobile is still regarded as an article of luxury and up to the present

time has not been considered as an adjunct of rural transportation. Under these circumstances, it is not strange that the roads of the country are rarely suitable for comfortable motoring.

MOTOR VEHICLES

The number of automotive vehicles (exclusive of those for military purposes) registered in the Kingdom on January 1, 1926, was as follows: Passenger cars, 4,996; trucks, 1,232; motor cycles, 1,485.

AIRPLANE SERVICES

Daily airplane passenger and parcel services linking Belgrade with Budapest and Bucharest are maintained by a French company during the seasons of fine weather. The Belgrade-Budapest planes connect with services running to Vienna, Prague, Warsaw, and Paris. The landing grounds are at Pančevo, about two hours from Belgrade by boat.

POSTAL, TELEGRAPH, AND TELEPHONE SERVICES

The postal, telegraph, and telephone services are all operated by the State and are administered by the Ministry of Posts and Telegraphs.

POSTAL SERVICE

There are 2,192 post offices in the Kingdom. During 1925, the postal traffic was as follows:

Items	Ordinary	Registered	Total
LETTERS			
Domestic	187, 636, 080	16, 914, 100	204, 550, 180
Foreign:			
Sent	18, 281, 598	3, 495, 826	21, 777, 424
Received	26, 280, 834	2, 296, 682	28, 577, 516
Total	232, 198, 512	22, 706, 608	254, 905, 120
POSTAL PARCELS			
Domestic	3, 078, 264	1, 613, 094	4, 691, 094
Foreign:			
Sent	58, 783	42, 282	101, 065
Received	791, 856	226, 818	1, 018, 704
Total	3, 928, 903	1, 882, 194	5, 810, 863

TELEGRAPH AND TELEPHONE SERVICES

The first telegraph line in Serbia was built in March, 1855, between Belgrade and Aleksinac. Within three years the Serbian lines were connected with the Turkish and Austro-Hungarian systems and constituted a much used link between Central Europe and Constantinople.

Telephones were introduced in Belgrade in 1887 as a part of the equipment of the police system. In 1894, the Belgrade-Nish line was built, but its use was entirely reserved for the military and the police authorities and it was only in 1897 that private telephones were authorized.

When the Kingdom of the Serbs, Croats, and Slovenes was created in 1918, the telegraph and telephone systems were in complete dis-

order and the Ministry of Posts and Telegraphs was confronted with the arduous task of not only reconstructing what had been destroyed during the war but of making an efficient system out of lines which had been constructed for needs differing greatly from those of the new Kingdom.

In Serbia, the entire pre-war system had been destroyed. The military authorities had priority rights on the improvised lines. In the old Austro-Hungarian Provinces, conditions were not vastly better, for the lines had been subjected to intensive usage during the war. Moreover, these lines all converged on centers in the old Dual Monarchy and did not provide suitable intercommunication services within the new State. For instance, there was no direct communication between Zagreb and Ljubljana.

The problem was attacked with such energy that the Minister of Posts and Telegraphs states with pride that more telephones were installed in Slovenia between 1919 and 1924 than during the entire previous history of that province. Belgrade and Zagreb now have direct lines to the capitals of all the neighboring countries except Italy. The connection with Italy extends only to Trieste.

At the end of 1924 there were 14,005 kilometers of telephone lines, with 27,457 subscribers. The telegraph lines were 20,039 kilometers in length. The lines and stations were distributed as follows:

Centrals: Regions	Telegraph lines, in kilometers	Telephone lines, in kilometers	Number of stations	
			Telegraph	Telephone
Zagreb	3,981	2,479	190	180
Sarajevo	3,810	1,888	126	106
Belgrade	3,176	3,392	142	139
Novi Sad	2,498	2,764	265	246
Skoplje	2,322	2,223	63	62
Split	1,820	435	165	34
Ljubljana	1,689	813	180	131
Cetinje	743	11	32	33
Total	20,039	14,005	1,163	931

Between 1921 and 1924 new telephone lines were established between Belgrade and Veliki Bečkerek, Belgrade and Skoplje, Belgrade and Budapest, Belgrade and Subotica, Belgrade and Sarajevo, Belgrade and Split, Zagreb and Sarajevo, Zagreb and Osijek, Ljubljana and Zagreb, Sušak and Fiume, Subotica and Szegedin (Hungary), Velika Kikinda and Temesvar (Rumania).

New telegraphic lines were established during the same period with the following terminals: Belgrade-Vienna, Belgrade-Trieste, Zagreb-Trieste, Cetinje-Skadar, Debar-Tirana, Sušak-Fiume, Zagreb-Ljubljana, Zagreb-Osijek, Zagreb-Maribor.

Plans are under consideration for further improvement of the service and it is reported that 27 telephone or telegraph lines are now under construction.

WIRELESS TELEGRAPHY

There are four wireless stations in the Kingdom. The ones at Belgrade, Sarajevo, and Zagreb are owned by the State and operated by the Ministry of Posts and Telegraphs. The Belgrade station has

a radius of 4,500 kilometers and is in constant communication with London, Paris, Lyon, Vienna, Budapest, Berlin, Athens, Stockholm, Rome, Prague, and Warsaw, while the one at Sarajevo has a radius of 3,500 kilometers and transmits to London, Vienna, Berlin, and Prague. The Zagreb station, which has only recently been completed, has a much more restricted radius and can only communicate with stations in the adjoining countries.

The most important wireless station in the Kingdom is at Rakovica, near Belgrade, and was erected by the French Wireless Telegraph Co. in 1924. The installations comprise the sending station and generating plant at Rakovica and a receiving station in Belgrade. It has a radius of 2,300 kilometers and is equipped to maintain communications with foreign posts. Although erected and owned by the French company, the administration is under the control of the Ministry of Posts and Telegraphs.

The Government has received, on account of reparations, complete installations for five wireless stations. These will be erected at Ljubljana, Podgorica (or Cetinje), Split, Novi Sad, and Skoplje.

RESOURCES AND INDUSTRIES

The wealth of the Kingdom is almost entirely in the form of natural resources which consist of large tracts of fertile soil, varied and abundant mineral deposits, vast forest areas, and the power, largely undeveloped, of the many watercourses.

Agriculture is the basic industry of the country, but is closely followed by cattle raising and forestry.

Mining, which ranks fourth, has never been able to attain the importance which the known deposits show to be possible, because of the lack of capital necessary to develop and extend the existing areas of production or to prospect regions where mineral wealth is known to exist.

Despite the abundance of water power, which has already been carefully surveyed and charted, manufacturing, although increasing, is in the early stages of development. As in the case of mining, the chief deterrent to the exploitation of the hydraulic forces and to the building of factories is the lack of capital.

Manufactures closely associated with the production of raw materials are treated in the section of this volume relating to the basic industry upon which they depend. All other manufactures are described in the section devoted to industries.

AGRICULTURE AND AGRICULTURAL INDUSTRIES

Approximately 10,000,000 persons, or about 85 per cent of the population, are engaged in agricultural pursuits and more than 11,000,000 hectares, or about 45 per cent of the total area of the Kingdom, are devoted to agriculture.

The principal agricultural region is the great Pannonian plain, formed by the basins of the Save, Drave, and Danube Rivers, which lies in the northern part of the Kingdom and is one of the most important grain-producing areas of Europe.

POLITICAL AND ECONOMIC FACTORS

Several political and economic factors, chief among which are the agrarian reform, the cooperative movement, and reclamation work, so seriously affect the agricultural situation that a brief discussion of them is necessary as an introduction to the methods of cultivation and the actual statistics of production.

AGRARIAN REFORM

HISTORICAL BACKGROUND

One of the first problems facing the Kingdom of the Serbs, Croats, and Slovenes, upon its formation, was the agrarian reform involving the partition of the large estates and the abolition of the feudal rights which still existed in some of the Provinces. As this problem was not identical in the several regions, owing to the difference in their historical and social backgrounds, there is presented below a

preliminary sketch of the conditions prevailing in each Province prior to the institution of the agrarian reform.

Serbia and South Serbia (Macedonia).—When, in 1833, the Principality of Serbia secured its freedom from the Ottoman Empire, feudal rights were abolished and the Serbian peasants became the owners of the land which they had previously cultivated as the hereditary serfs of the Turkish landlords. These latter received no indemnities for their dispossession. In 1878, Serbia conquered six more departments from Turkey. The Serbian people in this newly won territory were recognized as proprietors of the land which they had tilled but the Turkish landowners were indemnified for their loss.

In South Serbia (Macedonia), which continued to form a part of the Ottoman Empire until 1912, feudal rights were abolished by a decree of the Sultan in 1839, but before the law, which rendered this edict effective, was published in 1858, the Turkish lords succeeded in transforming their feudal tenure into legal ownership, so that the new régime brought no modification in the relations between the landlords and the serfs.

Montenegro.—No feudal rights existed in the former Kingdom of Montenegro, nor were there any large estates.

Bosnia-Herzegovina.—In Bosnia–Herzegovina, the Turkish feudal rights, which were hereditary, were not abolished in 1858, but were actually confirmed a year later. After 1878, when Bosnia-Herzegovina came under the administrative control of Austria, everything was done to gain the good will of the Turkish lords, or "begs," and the lands held in feudal tenure were inscribed in the newly established land registers as the legal property of the "begs." The "begs" had on their estates, in addition to the "kmets" or feudal vassals, other dependents known as "beglouks," who were subjected by farming contracts to the absolute control of the "begs." These "beglouks" were theoretically freemen, but they were actually the economic vassals of the masters of the estates on which they worked. For reasons of expediency, the provincial government in 1896 passed an ordinance protecting the serfs or "kmets" from expulsion from land which they had worked for at least 10 years. Finally, in 1912, the Government passed a law permitting the release of the serfs, by mutual agreement, from their feudal obligations, but only at their own expense. Although the Government, by a public loan, provided the funds from which the peasants could borrow the sums necessary for their freedom, this measure gave no appreciable results.

The relations between the "begs" and "kmets" were purely feudal. The latter tilled the soil and received a fraction, usually from one-fifth to one-third, of the harvest for their work, and they were further obliged to render personal service to the "begs."

Dalmatia.—The feudal rights in Dalmatia were of mixed origin, some of them going back to the time of the Roman colonies; others to the old Turkish military régime, and still others to the period of the domination of the Venetian Republic. These feudal rights continued down to the end of the World War, as Dalmatia was specifically excepted from the several decrees issued between 1848 and 1851 abolishing serfdom on Austrian territory.

Slovenia, Croatia-Slavonia, and the Voivodina.—Serfdom and feudal rights were abolished in these provinces in 1848 as a result of the revolution of that year. By the decrees of 1853 and 1857 a small

part of the large estates was divided among the peasants, and at the same time the lords were recognized as absolute owners of the remainder of the lands. Unfortunately the land thus received by each peasant family was too small for its support, and the members were obliged to do day labor on the large estates in order to eke out an existence. The life of ease of the large landowners, whose estates frequently contained 40,000 to 50,000 acres, contrasted so vividly with the poverty of the peasants that these latter became more and more discontented and insisted upon drastic partition of the large properties, but nothing was done.

The problem in these Provinces was different from that in Bosnia-Herzegovina, Dalmatia, and Macedonia, where hereditary serfdom existed, but the economic condition of the population was scarcely better, because of the immense holdings of the large proprietors who had a practical monopoly of the arable land and could dictate the terms upon which they would lease it or employ the peasants.

LEGISLATION AND ADMINISTRATION

In his first proclamation to his people at the end of 1918, the Prince Regent solemnly promised that there would be an agrarian reform which would abolish feudal privileges and the large estates, that the land would be given to the poorer peasant population, and that the proprietors would receive an indemnity for the land thus expropriated. The first step of the Government to meet the Royal promise was in the form of a regulation, dated February 25, 1919, providing for the abolition of feudal privileges and similar relations; the expropriation of the large landed estates and their provisional distribution among the poor peasants pending the elaboration of a definite plan of colonization; and the annulment of all contracts for "metayage" on the large estates. The constitution which was voted on June 28, 1921, contained the following two articles:

ART. 42. The feudal relations are considered as legally abolished from the date of liberation from foreign domination. If prior to this date injustices have been committed in the suppression of feudal rights or in their transformation into civil rights, the law must correct these injustices.

ART. 43. The expropriation of the large landed estates and their distribution among those who work the land will be regulated by law. The law will determine likewise the nature of the indemnity which will be allotted for the expropriated domains. No indemnity will be accorded for those large estates which have belonged to the members of ancient foreign dynasties, nor for those which have been donated to certain persons by the foreign domination.

Colonization will be done, by preference, through the agency of the freely organized cooperatives for colonization; care will be taken that the colonists be provided with the means indispensable to the success of production.

At the time of the carrying out of the colonization and of the distribution of the expropriated lands preference will be given to the needy soldiers who fought for the liberation of the Serbs, Croats, and Slovenes and to their families. The law will determine the maximum area of the landed estates as well as those cases in which a minimum of land can not be expropriated.

The constitution is still the only basis for the agrarian reform, as no law regulating this matter has yet been voted by the Parliament.

The Ministry of Agrarian Reform, acting upon the provisions of the constitution and on the basis of ministerial decrees, is actively proceeding with the agrarian reform along the following lines: (1) The legal suppression of the feudal privileges in Bosnia-Herzegovina, Macedonia, and Dalmatia; (2) the expropriation of the large estates

in those Provinces where feudal rights have been abolished; (3) a colonization of those parts of the country which are insufficiently peopled, by transferring families from those regions which are overpopulated. The forests on the large estates are not subject to expropriation.

Already the feudal rights in Bosnia-Herzegovina have been absolutely abolished, and the lands of the "begs" have been given legally to the "kmets" who previously tilled them. The Government has indemnified the "begs" for the loss of their property by the payment of 225,000,000 dinars, of which one-half was in cash and the remainder in 4 per cent State bonds. The status of the "beglouks" was regulated by the decree of May 12, 1921, which provided that in those cases where the dependency had existed for more than 40 years and was not recorded in a regular lease, the "beglouks" could purchase, at double its assessed value, the land occupied by them and that in cases where the dependency had only existed for more than 10 years the land could be obtained by forced purchase at a price agreed upon between the "beg" and the "beglouk," and in the event that no agreement is possible the price is to be fixed on the basis of the productive value of the soil.

In order to regulate the relations between the proprietors and the peasants in Dalmatia the Ministry of Agrarian Reform submitted to the Parliament on June 10, 1923, the project of a law specifying the different forms of feudal rights and similar relations which were to be abolished in accordance with the terms of the Constitution. It proposed in principle that the serfs become full proprietors of the land which they cultivated without payment of any indemnity, while the metayeurs would only become proprietors of the land which they cultivated under contract upon the payment of a partial indemnity. This law has not yet been passed, and no progress has been made toward the solution of this question in Dalmatia. Similar projects were elaborated at the same time by the Ministry of Agrarian Reform, regulating the agrarian relations in Macedonia, but, as they have not yet been submitted to the Parliament, the Macedonian situation still remains unsolved.

The expropriation of the large estates and colonization are both dealt with in a project of law which was submitted to the Parliament on June 10, 1923. Although this project has never been enacted, the provisions form the basis of the program of the Ministry of Agrarian Reform, which, by means of ministerial decrees, is proceeding with the work of settling the land question. In this bill the maximum area of landed property is specified for each Province, the area depending upon the quantity of arable land, the density of population, and other pertinent conditions. The maximum varies between 50–75 and 300 hectares. In case the proprietor of the estate does not cultivate his land the maximum is reduced to 57 hectares. If the proprietors of estates exceeding 50 hectares reside outside of the Kingdom, the amount of land to which they are entitled can not exceed 7 hectares.

These limits do not apply to model breeding farms or to farms devoted to seed culture. The indemnity for expropriation has to be paid in State bonds amortizable in 20 years and drawing 5 per cent interest. The land thus expropriated will be distributed to those farmers who have no land or insufficient land to provide for

the subsistence of their families. Volunteer soldiers of the World War are entitled to an allotment of land free, combatants receiving 5 hectares and noncombatants 3 hectares each. All others have to pay for the land accorded them within 10 years at 7 per cent interest. The State Mortgage Bank is charged with the financial liquidation of such matters. Colonists who have been granted lands from the expropriated domains can neither sell nor mortgage such land during a period of 15 years, unless they require credits for improvement, and then only with the permission of the Ministry of Agrarian Reform. The land will be withdrawn from those colonists who do not definitely take up their domicile upon the land within three years and who fail to cultivate it in a continuous manner.

COLONIZATION

The Government has made colonization of land belonging to the State an integral part of the agrarian Reform. It hopes by this method to reduce the number of inhabitants in those regions where the conditions of life are economically difficult (or else the population is too dense) and to increase it in those sections where the soil is more productive and the inhabitants too few to secure maximum production. Land acquired by expropriation, communal land in excess of the needs of the communes, land reclaimed by drainage or otherwise, and any vacant land of the State, is to be used for this purpose. Colonization is to be carried out in groups of 20 families each, and it is planned that each colony will be well supplied with drinking water and good roads.

The conditions governing the acquisition of land by the colonists are identical to those for other settlers on the expropriated estates—that is, payment for the land within 10 years at 7 per cent interest, except in the case of volunteers in the World War, who will receive their lots free.

The principal colonization regions are the Voivodina and South Serbia.

RESULTS OF AGRARIAN REFORM

By the close of 1923, 262,081 hectares of land belonging to the large estates had been expropriated and distributed among 210,912 families, representing more than a million persons. The expropriation was as follows:

Provinces	Land expropriated	Families
	Hectares [1]	
Slovenia	9,847	17,225
Croatia-Slavonia	68,609	98,335
Voivodina	135,890	89,702
South Serbia	47,735	5,650
Total	262,081	210,912

[1] 1 hectare=2.47 acres.

During the same period the total abolition of feudal rights in Bosnia-Herzegovina has been accomplished and 111,102 "kmet" families have been recognized as the legal proprietors of the land that they had previously tilled, which totaled 775,233 hectares. About

150,000 hectares of so-called "free" land which were cultivated under contract by the "beglouks" were released to these latter.

The economic consequences of the agrarian reform are difficult to forecast. Under prewar conditions there was no incentive for the peasant class to expend the energy necessary to attain maximum production, but the breaking up of the large estates into very small farms tends to diminish production, as the smaller units can not be cultivated as rationally and to the same advantage as large estates. It is probable, however, that the inherent love of the peasant for the land and his pride in his own property will more than offset the economic disadvantages of the small farms.

AGRICULTURAL COOPERATIVE SOCIETIES

After the abolition of feudal rights in Serbia in 1833, the agricultural land was held by small proprietors whose farms averaged 7 or 8 hectares each. The recognition of their rights to the lands which they had previously tilled as the vassals of the Turkish lords did not give them economic independence, as they lacked the necessary capital or credit to purchase the simplest implements or to market their crops. The Government realized this situation and came to their aid with protective laws, providing that the homestead, farming implements, a definite number of head of live stock, and a minimum of land could not be seized for debt.

Between 1836 and 1839, other measures provided for the restriction of the right of imprisonment for debt; the limitation of interest rates; the establishment of village granaries, to which each farmer was obliged to contribute a small portion of his crop in good years in order that loans could be made from this stock in times of crop failure; and the granting of credits from the State Treasury. Later laws fixed the succession of landed property so that only the male members of a family could inherit the soil and granted the exclusive right of issuing loans on farm mortgages to the State Mortgage Bank. Nevertheless, the peasants continued to contract debts and to have recourse to usurers. This condition of affairs aroused the interest of a number of public-spirited men, with the result that they formed in 1894 an agricultural credit cooperative society at Vranovo, the functions of which were to advance credits to agriculturists and to supplement the measures which the State had already taken in behalf of the peasant and farmer. This initial cooperative society in Serbia met with such immediate success that others were formed, and in 1897 the first Union of Cooperative Societies in Serbia was founded. Cooperative societies then began to be formed to meet the other needs of the agricultural population, such as cooperatives for the purchase of materials, for the development of vineyards, producing cooperatives, and so on through all the activities affecting farm life, even to rural health cooperatives.

In the former Austro-Hungarian Provinces, the cooperative movement antedated that in Serbia. As early as 1855, a Slovenian Credit Cooperative society was established at Ljubljana and by 1883 the first Union of Slovenian Agricultural Credit Cooperatives was formed. The first Serbian Agricultural Credit Cooperative in Croatia was founded at Zagreb in 1892, and by 1902 the societies numbered 39. In these two Provinces, Croatia-Slavonia and Voivodina, the bulk of the land was held by large proprietors, and those peasants, usually

Serbs or Croats, who owned small farm areas were in constant danger of losing their property through debt. It was the purpose of the Serbian Agricultural Credit Cooperative in Croatia to protect them and to advance them the necessary credits to develop their lands.

The large estates were invariably owned by landlords who, as a rule, did not themselves engage in the cultivation of their lands. They consequently leased their properties to the highest bidder, banks or capitalists, who, in turn, subleased them in small lots to the peasants. The sublease usually drew from 8 to 10 times the rental paid to the owner, with the result that the peasants, who were attached to the soil, were obliged to pay very high charges for the right to farm. Such conditions resulted in a very heavy emigration movement among those who had the means and the initiative to go abroad. The Serbian Agricultural Credit Cooperatives in Croatia decided to extend their activities and to bid for the leases of the large estates, and thus become intermediaries between the proprietor and the actual tillers of the soil. They were successful in obtaining a great proportion of the land of Croatia-Slavonia and the Voivodina, which they sublet to the Croatian and Serbian peasant population at a small advance over the rental paid to the proprietors. The central group of buildings forming the farm establishment on each estate was conserved intact and was operated by the cooperative society as a model farm for the instruction of peasants in rational agricultural methods. This phase of cooperative work resulted, in a measure, in the economic emancipation of the peasants and permitted them to live under better conditions than ever before.

In addition to the economic results of their activities, the cooperatives, by grouping together the Croatian and Serbian elements, were able to check their denationalization and to preserve their national characteristics and traditions.

The cooperative movement in Bosnia, which was initiated with the formation of an agricultural credit cooperative at Sarajevo in 1912, was the result of the extension of the activities of the Serbian body at Zagreb, while in Dalmatia the first cooperative society, which was formed at Split (Spalato) in 1914, was an outgrowth of the Slovenian organization.

In 1919, the principal agricultural cooperative unions of the entire country united to form the "Central Cooperative Federation of the Kingdom of the Serbs, Croats, and Slovenes," with headquarters at Belgrade. This federation acts in an advisory capacity to the various cooperatives, but does not restrict the autonomy of the individual units of the organization.

In the Voivodina, the Ministry of Agrarian Reform has recently founded agrarian associations to assist in the carrying out of the agrarian reform. These cooperatives guarantee collectively the debts of their members to the State, and furnish credits and agricultural materials to farm laborers and colonists. These associations, which are divided into two unions, one at Novi Sad for the Voivodina and one at Skoplje for South Serbia, are distinct from the agricultural cooperative unions and exist entirely on subsidies from the ministry.

At the close of 1924, there were 1,993 cooperatives in the Kingdom, of which 1,220 were credit cooperatives. The turnover of the Central Cooperative Federation in Belgrade totaled for the year 936,140,633 dinars, while the net profits amounted to 733,681 dinars.

AGRICULTURAL CREDITS SYSTEM

On June 17, 1925, a law was promulgated establishing an agricultural-credits system, through the working of which the agriculturists in the Kingdom are now able to obtain credits for their more important needs. Prior to the passing of this law there was no Government organ in the Kingdom that could advance the necessary funds to farmers, as the State Mortgage Bank was prevented by law from making loans on crops and unproductive lands. During the three years following August, 1922, the money stringency in the Kingdom resulted in such high interest rates that the small farmholdings which could be mortgaged under the regulations governing the operations of the State Mortgage Bank were rarely sufficient to cover the credits required to finance crops, purchase seeds, or improve the economic conditions of small rural proprietors. Naturally the agricultural element, which comprises approximately 85 per cent of the total population, demanded the establishment of some credit agency which would satisfy their needs.

ORGANIZATION

The law established an agricultural credit system as an autonomous State organ, subsidized by the Government and under the supervision of the Ministry of Agriculture and Waters. The salient feature of the new institution is the fact that it is composed of and administered by agriculturists. The basic units of the organization are the local agricultural credits cooperatives [16] which are to be formed in the smaller political divisions or communities of the Kingdom. Each of these local organs must have at least 20 members, all of whom must be farmers residing in the region if they desire to participate in the activities of the cooperative. Only one such unit can be constituted in a given territory. The local units of each "oblast" [17] will unite to form one district agricultural credit cooperative. Above these district organs is the Directorate of Agricultural Credits, which is the administrative head of the system and which forms the link between the Government and the district cooperatives.

The Directorate of Agricultural Credit is governed by an administrative committee composed of one member of the Council of State, one member of the General Court of Accounts, one member from the National Bank, seven representatives of the Ministry of Agriculture and Waters elected from among the agricultural and cooperative experts of the ministry, one representative from each district cooperative, and one representative of the Ministry of Finance.

All of these members are appointed by the Ministerial Council upon the nomination of the Minister of Agriculture and Waters, with the exception of the representatives of the provincial cooperatives, who are appointed by the respective general assemblies of the cooperatives.

In order to facilitate transactions and to promote efficiency the administrative committee is authorized to appoint from among themselves an executive committee composed of not more than nine members, including one representative of the Minister of Agriculture

[16] These new cooperatives are not to be confused with the agricultural cooperative societies which for many years have been such an important factor in the rural life of the various sections of this Kingdom.
[17] An "oblast" is the largest political subdivision in the Kingdom.

and Waters, and also to appoint a committee of supervisors consisting of no more than five members, one of whom must be a representative of the Minister of Finance.

LIABILITY OF COOPERATIVES

The cooperatives must all be legal entities and organized either with unlimited liability or limited liability. In the first case, the members of the cooperatives are responsible jointly to the extent of their entire property for the liabilities of the cooperative, while in the second case they can only be held responsible to the extent of their common shares, plus an amount fixed in advance which can never be less than 10 times the amount of their subscribed shares.

The capital necessary for the proper functioning of this system is derived from the following sources:

1. A fund of 500,000,000 dinars to be voted by the State as a part of the budget of the Ministry of Agriculture and Waters. Of this total, 50,000,000 dinars is carried in the budget for 1925–26. A like sum is voted for the 1926–27 budget, and it is provided that the budgets for successive years carry an annual appropriation of 100,000,000 dinars until the completion of the specified sum.
2. Fifty per cent of the annual net profits of the State Lottery, beginning with the year 1927.
3. The balance obtained from the liquidation of the former Agricultural Bank of Skoplje.
4. Funds allotted to the directorate by subsequent legal acts.
5. Savings deposits of private persons entrusted to the directorate for safe keeping.
6. The transfer of the national economic funds already deposited in the State Mortgage Bank.

The new shares of the land communities and cooperatives must immediately upon request be deposited in the Directorate of Agricultural Credit.

To the extent that these funds are deposited in the State Mortgage Bank they shall be remitted to the Directorate of Agricultural Credit according to its needs within a period of not more than five years.

The State shall guarantee all these funds, and the directorate shall pay to all of them not more than 4 per cent annual interest.

KINDS OF LOANS

Loans are divided, according to the needs or purposes for which they are made, into short-term, moderate-term, and long-term loans.

Short-term loans may be made for the cultivation of land, for the purchase of seeds, fertilizers, forage, etc., for wages, and, in general, for the immediate transient needs of the farmer. They must be repaid within one year. Moderate-term loans may be made for the drainage of land on a small scale,and for small construction work. They run for a maximum of 8 years.

Long-term loans may be granted for the purchase of land, construction of houses and barns, for the purpose of improving land, by drainage, irrigation, etc., or for any of the larger phases of agricultural work. Long-term loans are for a maximum period of 25 years.

METHODS OF MAKING LOANS

The Directorate of Agricultural Credit may grant short or moderate term loans to provincial agricultural credit cooperatives, at not more than 4 per cent interest and long-term loans at not more than 3

per cent interest. To other agricultural associations and institutions only short or moderate term loans may be granted, and only at the same rate of interest as the discount rate of the National Bank (the present rate is 6 per cent).

Provincial agricultural credit cooperatives may grant short, moderate, or long term loans, but only to local agricultural credit cooperatives, and these latter may only grant moderate and short term loans to their individual members.

SECURITY FOR LOANS

The law is much more liberal than that regulating the State Mortgage Bank and places no limitations upon the kind of property which may be mortgaged as security for credits advanced. Great latitude of action in the matter of guaranties for loans is left to the directorate and the cooperatives, and in many cases loans may even be made on acceptance by persons who are generally recognized as financially sound. It was obviously the intention of the legislators to afford the administrators as much elasticity as possible in the management of credits, in the belief that the inherent interests of the various agriculturists who would become responsible entities in the new organization would be the surest guaranty of the system.

ADVANTAGE TO FARMERS

As the farming element has entire control over this new institution, it is able to utilize to the fullest extent the capital placed at its disposal through this agricultural credit system, and can prevent its being diverted to other channels. Furthermore, in view of the fact that the various organs of the system have authority to pass on the kind of property that is acceptable as mortgages for loans, and as these organs are administered and officered by farmers, there is every reason to suppose that a maximum of credit service will be rendered and that care will be taken to protect the institution against unwise advances.

RECLAMATION AND IRRIGATION

Reclamation and irrigation play an important part in the development of agriculture in the Kingdom of the Serbs, Croats, and Slovenes. In the Pannonian Plain, the protection of the low grounds from inundations and the drainage of marshy places are necessary to the full agricultural development of the region; in South Serbia, the plain formed by the Vardar and its tributaries needs irrigation and a proper distribution of the water; while the "poljes" require drainage to render them efficiently productive.

HYDRAULIC ASSOCIATIONS

This reclamation work has been left almost entirely to the initiative of "hydraulic associations." The basis of these organizations is the land to be improved, the proprietors of which unite to execute the necessary work. Whenever the holders of a majority of the land in a given region declare in favor of the formation of a hydraulic association, the minority landowners are obliged to join the movement. Each proprietor assumes such a proportion of the expenses of the operation of the association as is commensurate with the benefits which his land is expected to derive therefrom. Should the land

change hands, the new proprietors are obliged to become members of the associations and to assume the obligations of their predecessors.

While these associations are private, they are formed and function under the supervision of the State.

METHOD OF FINANCING

As the hydraulic associations rarely possess adequate funds to finance their own reclamation projects, loans are sought for this purpose. The entire property of the members of the associations, under the laws governing their organization and operation, serves as a guarantee for the interest and amortization of such loans. Each member is obliged to pay an annual assessment (based on the estimated benefits accruing to his land from the reclamation work) for the interest and amortization charges as well as for the upkeep of the dikes, canals, or other works maintained by the association.

The collection of the sums due from each member of the association is either made entirely by the association itself or, if the association desires, by the State, which collects the contributions through its fiscal agents. In this latter case a small additional charge is added to cover the expenses of collections. Should a member fail to meet his obligations toward the association, the collection of the contribution from him can be enforced through the State agents in the same way as is done in the case of delinquent taxpayers. In other words, seizure of the property of the delinquent may be made to satisfy the legitimate demands of the association. Such contributions due to hydraulic associations have priority rights following immediately after the claims for national and communal taxes. Consequently, claims under mortgage rights come only after those of the hydraulic associations.

The associations either obtain their loans directly from banks or financial institutions, or else through the intermediation of the State Mortgage Bank.

STATE SUPERVISION

The State supervises the operations of all such associations, and the projects for land reclamation must in all cases be approved by the National Government, acting through the Ministry of Agriculture and Waters, which has a special section devoted to this service. The Government not only approves the plans of such works, and in case of need enforces the collection of the contributions due from members of associations, but even supervises or controls the actual execution of the projects.

WORKS COMPLETED OR PROJECTED

At the time of the unification of the Kingdom in 1918, 77 hydraulic associations had been formed, covering an area of 1,016,655 hectares. Their equipment comprised 102 pumps, with a total of 687 horsepower. Dikes to a total length of 153 kilometers had been constructed, as well as a number of drainage canals.

In 1923 a complete program was drawn up which provided for the organization of 130 new associations covering 974,649 hectares. Up to date, nine of these associations, covering 81,770 hectares, have been formed and work can be started as soon as sufficient capital, estimated at 234,197,000 dinars (about $4,000,000), becomes available.

There remain 121 associations, covering 892,879 hectares, to be formed, to which end the General Directorate of Waters is now actively devoting its energies. The cost of this reclamation work, for which plans are now being drawn, is estimated at 1,340,000,000 dinars (about $25,000,000). The importance of this reclamation program can be readily seen from the fact that the reclaiming of these 974,649 hectares at a total estimated cost of 1,578,197,000 dinars (about $29,000,000) will increase the annual agricultural production by about a million metric tons of wheat or corn, all of which will be available for export.

About 75 per cent of the completed reclamation work is in the Voivodina. The lands that still remain to be reclaimed are for the most part along the Save River.

It is interesting to note that the reclamation work for the whole Kingdom is already planned.

KINDS OF RECLAMATION

Drainage of marshy areas by canals and the building of dikes to prevent inundations constitute by far the greater part of the reclamation work. Up to the present time, very little has been accomplished by irrigation. The program, however, carries projects for irrigation of the region traversed by the Neretva River near Mostar in Herzegovina and of the region around Skoplje in South Serbia. There are also a number of "poljes," in the karst regions near the Adriatic, which require drainage. When these actually become producing areas, the surrounding regions which are now deficient in production will be nearly self-sustaining.

AGRICULTURAL METHODS

ROTATION OF CROPS

Rotation of crops can not be very effectively carried out on most of the small farms, as the principal crop covers about two-thirds of the cultivated area. However, a rotation of two years is, in a measure, practiced in the regions south of the Danube and Save Rivers. The usual system alternates corn with wheat or some other small grain. In the Pannonian plain and in Slovenia, there is a more diversified rotation, in which corn, wheat, sugar beets, red clover, and other crops figure, the cycle being normally three years.

FERTILIZERS

The natural richness of the soil has been exploited in the past with little or no use of artificial fertilizers; such soil amendments as were required were furnished by the manure derived from the few head of livestock which are invariably possessed by the rural landholder. However, on the large estates in the Voivodina and Croatia-Slavonia artificial fertilization was to some extent practiced in pre-war times. Recognizing the need of stimulating production, the cooperative societies have endeavored to popularize the use of artificial fertilizers by organized propaganda, and their use is now gradually extending as the advantages of fertilization are becoming more generally known.

The consumption of artificial fertilizers in 1925 was slightly more than 40,000 metric tons, of which about 34,000 metric tons were

superphosphates. The Voivodina leads in the consumption of artificial fertilizers, with about 50 per cent. Croatia-Slavonia comes second, with about 25 per cent, and Slovenia third, with about 15 per cent.

SEED SELECTION

Up to the present time, seed selection has been little practiced. The Ministry of Agriculture and the Agricultural Cooperatives are making strong efforts to induce farmers to pay more attention to seed selection as one of the best means of increasing the crop returns.

AGRICULTURAL EQUIPMENT

In the large agricultural centers such as are found to the north of the Save and Danube Rivers, the use of tractors and modern agricultural machines was fairly well developed in pre-war times. During the World War, however, a great deal of this machinery was either destroyed or became deteriorated and has not yet been entirely replaced. In general, Croatia-Slavonia and the Voivodina offer a good field for the use of modern farm implements, whereas in the other provinces of the Kingdom only the simplest forms of agricultural equipment are being used, partly because the farms are so small that they can not advantageously employ modern machinery and partly because the peasants are too conservative to adopt up-to-date methods. The small size of the farms in the regions to the south of the Danube and Save Rivers and the breaking up, under the agrarian reform, of the large estates to the north of these rivers, are handicapping the introduction of large machinery for the preparation of the soil and for the handling of the agricultural output. The cooperative societies and the paternalism of the more advanced communities are both tending to overcome this handicap by the purchase of the necessary large and expensive machinery requisite for the proper tilling of the lands, reaping of the harvest, and threshing of the grain.

The machines purchased by such organizations are rented to small proprietors at rates which are reasonable and which permit of the amortization of the capital expended.

This method of renting modern equipment for the cultivation of small farms obviates the need of the purchase by individual farmers of modern costly machinery which can not be employed economically on small farms, and also relieves the small landholder of the necessity of finding capital to acquire the necessary efficient implements.

The gradual extension of this activity will ultimately result in modern methods and up-to-date machinery becoming usual throughout the entire Kingdom, as there are no physical difficulties, such as dividing fences between the farms, which would prevent the consummation of this work of development.

AREA UNDER CULTIVATION

The total area of the Kingdom is divided as follows:

	1925	Average 1920–1924
	Hectares	*Hectares*
Forests	7, 374, 973	7, 374, 973
Agricultural lands	11, 122, 863	11, 103, 992
Unproductive lands	6, 350, 993	6, 419, 735
Total area	[1] 24, 848, 829	24, 898, 700

[1] Figures for total area as revised by Ministry of Agriculture.

Agricultural lands are divided as follows:

Classes	1925	Average 1920–1924	Classes	1925	Average 1920–1924
	Hectares [1]	*Hectares* [1]		*Hectares* [1]	*Hectares* [1]
Fields	6, 017, 178	6, 172, 818	Orchards	250, 955	245, 570
Gardens	125, 265	145, 522	Marshes	151, 960	189, 208
Meadows	1, 640, 805	1, 561, 416			
Pastures	2, 758, 729	2, 650, 009	Total	11, 122, 863	11, 133, 086
Vineyards	177, 971	168, 543			

[1] 1 hectare=2.47 acres.

Voivodina and Croatia-Slavonia form the real center of the agricultural industry, as their yields not only are sufficient for their population, but invariably supply a large surplus for exportation and for the needs of the less favored Provinces.

Serbia, Slovenia, Bosnia, and Croatia-Slavonia grow sufficient produce for their own local consumption, but Dalmatia, Herzegovina, Montenegro, and South Serbia are all deficient in agricultural production, and their output must be supplemented by foodstuffs from the more prosperous sections of the Kingdom or from abroad.

The cultivation of fields is distributed as follows:

Character	1925	Average 1920–1924	Character	1925	Average 1920–1924
	Hectares	*Hectares*		*Hectares*	*Hectares*
Cereals	4, 953, 473	4, 638, 338	Forage	208, 075	229, 593
Leguminous plants	92, 708	80, 005	Fallow land	298, 275	796, 262
Tubers	261, 646	251, 524			
Industrial plants	117, 880	99, 002	Total	6, 017, 178	6, 172, 818
Garden vegetables	85, 121	78, 094			

One of the salient features in the agricultural situation is that, with the exception of Croatia-Slavonia, none of the Provinces of the Kingdom has reached its pre-war production. This is due to reduction in farm equipment, to the diminution of the number of draught animals, to the agrarian reform which partitioned the large estates, and to colonization.

In recent years there has been a distinct trend toward increasing the area planted to cereals and industrial plants at the expense of the other kinds of culture which are primarily for domestic consumption.

CEREALS

Cereals cover approximately 80 per cent of the area under cultivation. Corn is the leading crop and is closely followed by wheat. These two cereals represent about 85 per cent of the total grain production, of which wheat furnishes normally about 30 per cent and corn 55 per cent. Barley, rye, oats, and other grain are also grown.

The winter wheat yield is tending to increase, with larger surfaces planted each year and greater yields per unit of area. The production per hectare was 8.27 metric quintals in 1922, 10.84 metric quintals in 1923, 9.26 metric quintals in 1924, and 11.83 metric quintals in 1925. Fully 60 per cent of the total output is grown in the Voivodina and Croatia-Slavonia.

Corn shows very wide fluctuations in production, as it is more subject to climatic conditions. Frequently, early indications of an excellent harvest do not materialize because of hot dry summers which damage the crop. The yield per hectare was 11.94 metric quintals in 1922, 11.95 metric quintals in 1923, 19.31 metric quintals in 1924, and 18.30 metric quintals in 1925. The area planted to this cereal is tending to increase. At least 70 per cent of the corn production is furnished by the Voivodina and Croatia-Slavonia.

Barley is grown principally on land unsuitable for wheat and corn. Croatia-Slavonia, South Serbia, Serbia, and Bosnia supply about two-thirds of the production. The yield per hectare for winter barley was 7.13 metric quintals in 1922, 9.22 metric quintals in 1923, 8.55 metric quintals in 1924, 11.90 metric quintals in 1925, and for spring barley 5.55 metric quintals in 1922, 7.49 metric quintals in 1923, 7.39 metric quintals in 1924, and 9.70 metric quintals in 1925.

Rye, like barley, is a product of the less-favored regions, and more than 60 per cent of the yield is from South Serbia, Croatia-Slavonia, and Slovenia. Very little spring rye is planted. The yield per hectare for winter rye was 6.12 metric quintals in 1922, 8.24 in 1923, 7.36 in 1924, and 10.56 metric quintals in 1925.

About 70 per cent of the oat harvest is supplied by Croatia-Slavonia, the Voivodina, and Bosnia; the yield per hectare was 6.78 metric quintals in 1922, 8.36 metric quintals in 1923, 8.56 metric quintals in 1924, and 10.05 metric quintals in 1925.

Rice is grown in South Serbia and the Voivodina, the former region supplying about 60 per cent of the total production.

Spelt, buckwheat, and millet are all grown in small quantities.

The statistics of cereal crops are presented below:

Cereals	1923		1924		1925	
	Hectares	Metric tons	Hectares	Metric tons	Hectares	Metric tons
Corn	1, 943, 525	2, 153, 567	2, 002, 918	3, 792, 937	2, 146, 119	3, 790, 664
Winter wheat	1, 545, 563	1, 603, 768	1, 714, 196	1, 522, 992	1, 718, 390	2, 084, 343
Spring wheat	78, 419	58, 245	74, 919	49, 257	66, 433	56, 086
Winter barley	216, 778	192, 829	222, 124	182, 704	223, 245	261, 117
Spring barley	157, 172	113, 392	155, 980	110, 753	141, 276	133, 935
Winter rye	161, 489	129, 144	165, 161	117, 482	169, 525	176, 449
Spring rye	32, 371	20, 870	37, 168	23, 268	31, 723	23, 303
Oats	386, 807	311, 703	363, 654	301, 847	352, 080	345, 043
Rice	2, 052	24, 807	1, 533	19, 944	1, 500	1, 230
Others	108, 148	56, 914	105, 928	60, 110	103, 182	95, 164
Total	4, 632, 324	4, 665, 239	4, 843, 581	6, 183, 294	4, 953, 473	6, 967, 334

MILLING

The annual total consumption of domestic wheat is about 1,200,000 metric tons, all of which is ground within the Kingdom. In addition to this about 70,000 metric tons of wheat are annually milled for export. Of the total production of corn (maize), about 10 per cent, or 375,000 metric tons, passes through domestic mills. This places the total milling output at 1,625,000 metric tons. The amount of wheat ground within the Kingdom is steadily increasing, as every effort is being made to export flour rather than grain. The grinding of cereals for rural consumption is done, as the need arises, by water mills, which are found on practically every watercourse in the country, or by small local steam or motor-driven mills. The number of such small mills totals about 700, and their daily capacity varies from 5 to 20 metric tons.

The wheat which enters into the domestic or export trade is invariably ground in the large steam mills nearest to the place of production. The total milling capacity of the country is estimated at about 3,000,000 tons, and the production at approximaty 50 per cent of that total.

LEGUMINOUS PLANTS

Only an average of 1.30 per cent of the total area is planted to such vegetables, despite the fact that practically all leguminous plants of the Temperate Zone are successfully grown. With the exception of beans, they do not figure in the export trade. The area planted to these crops is tending to diminish and the yield to increase, as the production per hectare is on an ascending curve. Statistics showing area and yield for 1923, 1924, and 1925 follow:

Leguminous plants	1923		1924		1925	
	Hectares	Metric tons	Hectares	Metric tons	Hectares	Metric tons
Beans	38,745	37,921	40,080	37,802	41,507	25,818
Peas	5,895	4,806	5,295	4,283	4,754	3,289
Lentils	4,207	3,212	3,527	2,404	3,933	2,166
Kidney beans	4,903	4,617	4,928	4,427	5,288	4,541
Others	38,955	44,068	18,157	18,250	16,105	13,075
Total	92,705	94,624	71,987	67,166	71,587	48,889

The above figures apply only to crops grown on areas devoted especially to this culture. Fairly considerable quantities of such vegetables are intercalated on areas planted to other crops. The statistics of such production for 1923, 1924, and 1925 were:

	1923	1924	1925
	Metric tons	*Metric tons*	*Metric tons*
Beans	36,060	49,773	53,540
Peas	451	334	386
Lentils	91	90	223
Kidney beans	709	666	356
Total	37,311	50,863	54,505

TUBERS

Potatoes form more than 80 per cent and forage beets more than 15 per cent of the total production of this branch of agriculture, although turnips and carrots are grown in sufficient quantities for local needs. Croatia-Slavonia and Slovenia furnish about 75 per cent of the potato yield, while the Voivodina, Slovenia, and Croatia-Slavonia, ranking in the order named, supply fully 80 per cent of the forage beets.

Statistics showing area and yield for 1923, 1924, and 1925 follow:

Tubers	1923		1924		1925	
	Hectares	Metric tons	Hectares	Metric tons	Hectares	Metric tons
Potatoes	217,245	1,160,420	222,892	1,027,482	233,306	1,223,777
Beets, forage	17,938	204,724	17,526	226,259	19,745	253,737
Others	9,566	72,733	9,106	52,025	8,595	53,882
Total	244,749	1,437,877	249,526	1,305,766	261,646	1,531,396

Potatoes are also grown in fields planted to other crops. In 1922, such production totaled 17,283 metric tons; in 1923, 21,849 metric tons; in 1924, 11,893 metric tons; and in 1925, 12,078 metric tons.

PLANTS FOR INDUSTRIAL PURPOSES: GENERAL SURVEY

The principal industrial plants grown in the Kingdom are sugar beets, cotton, flax, hemp, opium, tobacco, and hops. Sugar beets form about 90 per cent of the total yield. With the exception of opium, all of these plants supply raw material for domestic factories, with the natural result that there is a distinct tendency to increase the plantings and yield each year.

The following table shows the area under cultivation and yield for 1923, 1924, and 1925:

Industrial plants	1923		1924		1925	
	Hectares	Metric tons	Hectares	Metric tons	Hectares	Metric tons
Sugar beets	28,653	373,273	49,686	1,063,106	34,086	510,717
Cotton	634	146	772	277	880	419
Flax	13,752	8,698	13,307	8,474	13,196	10,214
Hemp	25,498	16,604	27,700	25,307	39,787	43,308
Poppy seeds	3,884	1,342	3,877	1,286	5,379	1,399
Tobacco	21,694	17,341	35,919	35,685	15,306	12,061
Hops	1,125	1,014	2,227	2,185	2,155	1,106
Others	4,003	2,887	5,165	3,543	7,089	4,483
Total	99,243	421,305	138,653	1,139,863	117,878	583,707

SUGAR BEETS

The production of sugar beets is concentrated largely in the Voivodina, which furnished approximately 75 per cent of the total yield. Croatia-Slavonia and Serbia follow in the order named. Prior to 1924, the crop was insufficient to supply the requirements of the

eight domestic sugar factories, and foreign sugars to the value of $2,000,000 to $3,000,000 were imported annually. During 1924, the area planted was so increased that the yield was not only sufficient to produce enough refined sugar for domestic consumption, but also to provide a fairly large surplus for export. The bumper crop of 1924 was followed by lower sugar prices, so that in 1925 the factories were unable to guarantee the growers as high returns for their beets. Disputes between the factories and the planters resulted in reduced plantings, and the yield in 1925 fell to less than 50 per cent of that of the previous year and less than the domestic requirements, which are, under normal conditions, about 80,000 metric tons a year. The surplus from the 1924–1925 yield was, however, more than sufficient to cover this deficit.

The future of the industry has been continually threatened by disagreements between the factories and the planters, but a working basis was reached in 1925, with the result that plantings increased to 42,000 hectares in 1926, from which a yield of 800,000 metric tons of beets is expected.

The production of refined sugar since 1919 was as follows:

	Tons		Tons
1918–19	29, 762	1922–23	33, 799
1919–20	13, 375	1923–24	40, 640
1920–21	20, 172	1924–25	122, 801
1921–22	23, 830	1925–26	56, 980

The output of sugar, molasses, and dried beet pulp by factories during 1924–25 was as follows:

Factories	Production, 1924–25 campaign		
	Sugar	Molasses	Dried beet pulp
	Metric tons	*Metric tons*	*Metric tons*
Bečkerek	18, 800	7, 800	7, 500
Belgrade	12, 186	7, 000	6, 959
Beli Manastir	15, 209	7, 225	4, 275
Crvenka	22, 924	9, 600	10, 000
Čuprija	10, 509	4, 187	1, 575
Osijek and Usora	23, 094	14, 611	9, 241
Vrbas	20, 080	8, 380	7, 880
Total	122, 802	58, 803	47, 430

This industry is locally important, but the country does not rank among the first 12 European producers of sugar.

The dried beet pulp is used as cattle food, and large quantities are exported. During 1925, more than 9,000 metric tons were shipped to the United States.

COTTON

The growing of cotton is in the early stage of development, but during the past few years the Ministry of Agriculture and Waters has been studying the possibility of increasing the culture in South Serbia, where cotton is now grown, and of starting plantings in Dalmatia and the Voivodina. It is believed that the soil and climatic conditions are favorable and that ultimately a large part of the domestic demand for this fiber will be met by locally grown cotton. The average

yield per hectare is about 250 kilos. The manufacture of cotton is dealt with in a later section of this volume under the heading "Textile industry."

FLAX

The production of flax is not very important and is now far below the level of former times. Fully 50 per cent is grown in Croatia-Slavonia. The average yield per hectare is about 700 kilos. The Ministry of Agriculture is endeavoring to increase this crop by distributing seed and by according other special privileges to the planters. The bulk of the output is manufactured by peasants into cloth for home needs and very little finds its way into trade channels, although there is a small export of cloth.

HEMP

Formerly hemp was grown in large quantities in the Voivodina, Croatia-Slavonia, and Serbia, but the deterioration of the seed and the parceling of the large estates of the Voivodina under the agrarian reform resulted in the decline of this branch of agriculture.

During the past three years the Ministry of Agriculture has sponsored a movement for an increase in the growing of this plant, and this is slowly bringing results, as is evidenced by the increased area under cultivation.

Approximately 85 per cent of the total production is furnished by the Voivodina, Croatia-Slavonia, and Serbia. The Voivodina alone supplies 30 per cent. The yield per hectare averages about 1,100 kilos.

As about 35 per cent of the territory of the last-named province is marshy, a considerable extension of the culture of hemp is possible. Of the total production, between 25 and 35 per cent is exported—principally to factories in Hungary for treatment. The remainder is manufactured within the Kingdom into cords, ropes, bags, and similar articles. A large proportion of the hemp is hand worked within the Kingdom in peasant homes. A considerable part of such handmade rope is exported to Turkey, Greece, and Bulgaria. There are several large factories manufacturing rope and cord, practically all of these being in the Voivodina. These large factories are capable of treating about 12,000 metric tons of retted hemp, but none of them work to full capacity. This industry is not yet sufficiently developed to supply the domestic demand. During 1925 the imports of cord and rope amounted to 192,413 kilos.

POPPY SEEDS AND OPIUM

Poppies are grown in South Serbia (Macedonia) on land which is not very well suited to any other culture. The annual yield varies considerably because of climatic conditions. The seeds are domestically used for seasoning cakes and breads, although a small quantity is annually exported. The shipments abroad totaled 546,356 kilos in 1925 and 1,130 kilos in 1924.

Crude opium is locally produced, but none is consumed within the Kingdom. It is sold through Saloniki merchants, principally to England and Germany.

The production of crude opium for the 1923–24 season is placed at 19,615 kilos, for the 1924–25 season at 138,456 kilos, and for the 1925–26 season at 66,664 kilos. The exports of crude opium totaled 52,578 kilos in 1923, 10,369 kilos in 1924, and 112,818 kilos in 1925.

TOBACCO

Tobacco production in the Kingdom is controlled by the Tobacco Monopoly, one of the seven branches of the Autonomous State Monopolies Administration.

RESTRICTIONS ON CULTIVATION

Under the provisions of the Serbian Monopoly Law of March 14, 1890 (extended to the entire Kingdom by the ministerial decree of September 14, 1920) the cultivation of tobacco is restricted to certain areas known by experience to yield a good quality. Even in these areas, tobacco planting is not allowed without the permission of the Tobacco Monopoly, which is under the supervision of the Ministry of Finance. The monopoly is obliged to meet 90 per cent of the country's demand with tobacco of domestic growth.

Cultivation is permitted within the approved localities only when it can be shown that 50,000 kilos can be produced annually, and within the various communes of the locality upon proof that the labor supply is adequate for the care of at least 5 hectares. Various other conditions are in force, among them the requirement that permits must be renewed annually. The monopoly reviews the applications for permits and notifies the various applicants of the amount of land which they may devote to tobacco.

Careful count is kept of the tobacco plants, and the growers are held strictly responsible for all tobacco grown by them.

SPECIES, TYPES, AND QUALITIES OF TOBACCO

There are only two species of tobacco grown in the Kingdom, namely, *Nicotiana tabacum* and *Nicotiana rustica*. The former is divided into two varieties—*Fruticosa angostifolia*, characterized by its smooth stems, and *Nicotiana purpurea*, distinguished by fuzzy stems.

These tobaccos are of the general type commonly described as Oriental or Turkish. The culture was introduced by the Turks, and the product closely resembles that grown in Turkey but is usually milder.

The finest grades are produced in South Serbia (Macedonia) and Bosnia. The principal designations of Yugoslav tobaccos, with the districts of production indicated in parentheses, are: Kruševac, Morava, Bajnovac, and Vranje (Serbia), Porsochan (Macedonia), Mrezko, Ševinac or Graljevac, Ravnjak or Buyher, and Tancha (Herzegovina), Focha and Bosnian, of which there are two grades, Srebrnica and Hungarian-Bosnian (Bosnia), and Segedin, divided into Pennsylvania, Rose of Segedin, Dobrecin, Sulak, Tissa, Muskateler, and Basta or Garden (Voivodina). The tobaccos grown in Croatia-Slavonia are inferior in grade and similar in type to those grown in Bosnia and Herzegovina, and the same applies to Dalmatian tobacco.

Cigarette and cut tobaccos are obtained from the plants of Serbia, South Serbia (Macedonia), and Herzegovina. The Focha tobacco of Bosnia is used for cigarettes of poor quality and the Srebrnica, also of Bosnia, for the cheaper tobacco products. The Hungarian-Bosnian tobacco of the better grades is used in cigar manufacture and the remainder for pipe tobacco. The tobacco of the Voivodina is largely grown for use in cigar making, but the *Nicotiana rustica* types are principally used for pipe tobacco. The tobacco of Croatia-Slavonia and Slovenia goes largely into the production of cigarettes and cut tobacco.

PLANTING SEASONS AND HARVESTING

Tobacco seeds are sown in March or April. Transplanting takes place in Dalmatia, Montenegro Herzegovina, and Macedonia in April and in the colder Provinces in May and June. From the time of transplanting, the plants require 100 to 120 days to mature. Consequently tobacco is harvested from August until as late as October.

MARKETING

The planters must sell their crop to the State Monopoly at a price fixed by the Minister of Finance on the basis of the recommendations of the management of the Tobacco Monopoly. The prices are officially announced prior to the planting season.

After control of the quantity by the authorities the bundles of tobacco are sorted into six grades. Usually tobacco is not ready for consumption until 10 or 12 months have elapsed from the sorting and packing of the crop.

The monopoly may, with the approval of the Minister of Finance, advance as much as 25 per cent of the price determined for the total quantity of tobacco which the planter is authorized to grow for a period from June 1 to the date of purchase, charging interest at the rate of 6 per cent per annum. The planter gives a promissory note, and the monopoly, as additional security, has a lien on the entire quantity of tobacco that the planter is authorized to grow and, if this is inadequate, on all other property of the planter. If the tobacco serving as security for the loan is destroyed by storms the payment of the loan may be deferred until the next crop. but the monopoly is entitled to the reimbursement of any expenses incurred.

Each entire harvest of leaf tobacco is carried over as a reserve stock from one calendar year to the next.

IMPORTS AND EXPORTS

The Direction of the Tobacco Monopoly is alone authorized under the law to import and export tobacco. These imports and exports do not figure in the foreign-trade statistics. Imports in 1925 totaled 281,318 pounds, while the exports amounted to 5,905,740 pounds, most of which went to Poland, Czechoslovakia, and Italy. Greater quantities could be placed abroad were it not for the competition of the Bulgarian product. Large surpluses have been produced since 1923, but the monopoly stores these surpluses rather than dump them on the market at a loss. Further restrictions on production are now being imposed, and permits are not issued for the production of inferior grades. As a result tobacco growing in Slovenia, Croatia-

Slavonia, northern Dalmatia, and certain districts of Bosnia and Herzegovina has been suspended, and the area planted has been considerably reduced.

The exportation of the tobacco crop surpluses has been financed by foreign banking interests.

MANUFACTURE

Cigarettes and cut tobacco are manufactured by factories at Niš (Nish), Podgorica, Travnik, Sarajevo, Mostar, and Banja Luka. Factories at Zagreb and Sinj manufacture only cigars. A factory at Ljubljana produces cigars, cigarettes, cut tobacco, and chewing tobacco. Cigarettes average 1 gram each in weight and cigars 5 grams. The present monthly capacity of all these factories is 235,000,000 cigarettes, 2,500,000 cigars, 560,000 kilos of cut tobacco, and 8,000 kilos of chewing tobacco.

STATISTICS OF PRODUCTION

The following table gives the statistics of tobacco production for the years 1919 to 1924, inclusive:

Years	Tobacco cultivated, in hectares	Yield per hectare	Number of plants	Production in kilos
1919	6,385	7.57	431,865,207	4,882,116
1920	11,991	7.53	661,700,064	9,028,654
1921	14,376	8.22	843,543,997	11,814,600
1922	12,715	7.38	721,183,363	9,391,300
1923	21,694	7.99	(1)	17,341,500
1924	35,919	10.13	(1)	35,685,100
1925	15,306	8.00	(1)	12,064,200

[1] Not stated.

Of the total yield, South Serbia supplies about 40 per cent, Bosnia-Herzegovina about 25 per cent, and the Voivodina about 15 per cent.

LOANS GUARANTEED BY TOBACCO MONOPOLY

The tobacco monopoly is a very remunerative State enterprise. This monopoly is also of great indirect benefit to the State, as its receipts serve as a guaranty for seven State loans.

HOPS

The Kingdom not only produces enough hops for its domestic consumption but has a considerable surplus each year for export.

Between 50 and 60 per cent of the total output is grown in the Voivodina and from 30 to 50 per cent in Slovenia. The exports totaled 1,278 metric tons during 1924 and 3,159 metric tons in 1925.

The production and exports of hops are both tending to increase.

The total output of beer is from 700,000 to 800,000 hectoliters. There is a brewery in practically every large town of the Kingdom, the total number in the country being 37. The production is about equal to the domestic demand.

MEDICINAL PLANTS

In addition to the items in the statistics, pyrethrum flowers, anise seed, gentian roots, chicory, sage, laurel, rosemary, and a number of

other medicinal plants are produced in the country. Pyrethrum flowers (used in the manufacture of insecticide powder) are grown principally in Dalmatia and Montenegro, the former supplying from 85 to 90 per cent of the total yield. The production varies considerably, but under favorable conditions totals from 1,200 to 1,500 metric tons. Practically the entire yield is shipped abroad. The exports in 1923 to the United States totaled 76 metric tons; in 1924, 37 metric tons; and in 1925, 125 metric tons.

The annual yield of chicory is about 2,000 metric tons a year. The output in 1924 was 2,068 metric tons and in 1925, 2,234 metric tons.

Definite statistics of the production of the other plants are not available, but estimates by competent authorities place the yield of anise seed at 200 metric tons, of sage at 750 metric tons, and of rosemary at 250 to 300 metric tons. The figures for the yield of gentian roots are not available, but the exports average about 150 metric tons annually.

GARDEN VEGETABLES

Garden vegetables are grown in sufficient quantities to supply the entire needs of the population and even, in certain cases, to provide a surplus for export.

As in the case of other agricultural products, a great deal still remains to be done in the way of seed selection and care for the plants, in order to reach a larger unit production as well as a high-grade product.

The statistics of production for the years 1923, 1924, and 1925 follow:

Garden vegetables	1923	1924	1925
	Metric tons	*Metric tons*	*Metric tons*
Cabbage	213, 853	213, 183	256, 249
Onions and garlic	45, 381	49, 798	59, 879
Tomatoes	21, 222	24, 374	24, 561
Red peppers	8, 367	11, 467	15, 831
Melons	82, 567	110, 610	95, 441
Total	371, 390	409, 432	451, 961

The canning of vegetables is a locally important industry, which will be dealt with later in a special section.

RED PEPPER (PAPRIKA)

Red pepper is an important crop and supplies a considerable surplus for export. Serbia and the Voivodina together supply about 70 per cent of the total yield. The production in Serbia is tending to increase, while in the Voivodina it is steadily declining. The exports of ground red pepper in 1924 and 1925 were 1,426 kilos and 501 kilos respectively.

The average yield per hectare is about 2 metric tons.

PUMPKINS AND SQUASH

Pumpkins and squash do not figure in the above statistics, as they are grown in corn fields and other land planted to principal crops.

Their production totaled 519,672 metric tons in 1922, 592,222 metric tons in 1923, 500,804 metric tons in 1924, and 529,209 metric tons in 1925. They are consumed within the Kingdom.

FORAGE

The leading forage crops are red clover, beets, and alfalfa, ranking in the order named. Beets have been previously treated under tubers.

About 60 per cent of the red-clover yield is grown in Croatia-Slavonia. Slovenia ranks second, with approximately 20 per cent, and the Voivodina third, with about 10 per cent. The average production per hectare ranges from 2.5 to 3.5 metric tons.

Alfalfa is the third forage crop. Croatia-Slavonia leads, with about 45 per cent and the Voivodina is second, with about 25 per cent. The average yield per hectare ranges from 3 to 3.5 metric tons. The entire production of forage plants is for domestic consumption. The statistics of production for 1923, 1924, and 1925 follow:

	1923	1924	1925
	Metric tons	*Metric tons*	*Metric tons*
Clover	360, 144	360, 774	361, 152
Alfalfa	197, 638	198, 944	229, 919
Total	557, 782	559, 718	591, 071

MUSHROOMS

In addition to the plants which are cultivated, there is a considerable production of mushrooms in the Kingdom.

About 200 edible varieties are known, but only 10 are actually used for food. Slovenia leads in the production of these delicacies. In 1925, the total exports of dried mushrooms were 19,151 kilos.

MEADOWS AND PASTURES

The meadows are the lowlands which are grown to grass. Their area and the production of hay during 1923, 1924, and 1925 are shown below:

Years	Hectares	Metric tons
1923	1, 607, 553	3, 070, 334
1924	1, 595, 698	3, 342, 771
1925	1, 640, 805	3, 772, 123

Practically the entire output of hay is consumed within the Kingdom, as the exports amounted to only 3,642 metric tons in 1923, 12,422 metric tons in 1924, and 7,632 metric tons in 1925.

The pastures are found, as a rule, on mountain slopes and other places too inaccessible for ready cultivation. They serve as grazing lands for livestock, chiefly sheep and goats.

The following figures show the area of pastures in 1923, 1924, and 1925: 1923, 2,695,505 hectares; 1924, 2,811,460 hectares; 1925, 2,758,729 hectares.

FRUITS

The soil and climate of the Kingdom are conducive to the production of fruit. However, little attention has been paid to grafting, pruning, and spraying, with the natural result that although fruit is abundant, it is rarely of the first quality.

The principal crops are grapes and plums. The figures of production during 1923, 1924, and 1925 are as follows:

VINEYARDS

Classes	1923		1924		1925	
	Hectares	Hectoliters	Hectares	Hectoliters	Hectares	Hectoliters
Grafted:						
On American stocks	120,933	4,414,222	121,538	2,918,156	136,820	4,097,412
On domestic stocks	45,852		43,880		41,150	
Total	166,785	4,414,222	165,418	2,918,156	177,970	4,097,412

ORCHARDS

Fruits and nuts	1923		1924		1925	
	Number of trees	Production	Number of trees	Production	Number of trees	Production
		Metric tons		*Metric tons*		*Metric tons*
Plums	56,268,383	893,664	49,357,220	322,026	52,567,655	950,229
Apples	7,096,453	137,057	6,535,851	180,769	6,673,574	168,014
Pears	3,417,805	81,578	3,473,786	57,526	3,574,999	79,789
Walnuts	1,670,293	28,974	1,882,411	40,915	1,949,958	38,587
Chestnuts	426,550	8,235	491,517	14,356	506,018	18,380
Figs	696,738	7,714	731,132	9,096	743,105	10,834
		Hectoliters		*Hectoliters*		*Hectoliters*
Olives	3,777,611	35,382	4,365,162	57,158	4,374,747	15,245

NOTE.—Hectare=2.47 acres; hectoliter=2.837 bushels (or 26.4 gallons); metric ton=2,205 pounds.

GRAPES

Grapes are grown throughout the entire Kingdom, but Croatia-Slavonia, Dalmatia, and Serbia together furnish fully two-thirds of the total production. In Serbia, the vineyards are small and rarely exceed 10 hectares. Vines of different varieties are intermingled in the same vineyards, and the grapes are gathered indiscriminately without attention to color or variety. Consequently, Serbian wines are characterized by their cinnamon tint and by their unevenness of quality and flavor. The method of pruning the vines is primitive and has not materially changed since the days of Turkish domination. The pruning takes place early in spring.

The vines are sprayed two or three times each year with Bordeaux mixture against peronospora, which is exceedingly prevalent. A sulphur spray is used against oidium, which is not so widespread. There are other vine diseases, but none of them has proved serious in this Kingdom. Phylloxera destroyed the vines in 1886, and American stocks then replaced the domestic. Phylloxera still occurs in vineyards not grafted on American stocks. In Serbia the

wine grape is chiefly of native origin, although during the last generation a number of foreign varieties have been introduced and have become entirely acclimatized.

The principal foreign varieties of table grapes are the white muscat, madeleine royale and madeleine dorée, cabernet franc, muscat Hamburg, and muscat Malaga.

Foreign varieties principally used for wine are the pinot noire, riesling, traminer, semillon, sanvignon, and cabernet franc.

Not only is the output of wine sufficient for domestic needs, but there is a fairly large surplus for export each year. The exports totaled 1,440 metric tons in 1924 and 1,094 metric tons in 1925.

The Government maintains 34 vine nurseries where short courses of instruction in viticulture are also given to the young men and boys of the district.

PLUMS AND PRUNES

The growing of plums has a twofold effect on the economic life of the country. Plums are grown primarily in order that slivovica, a potent brandy, may be manufactured. Plum jam (pekmez) and prunes are also consumed within the country to a considerable extent. After the domestic needs have been met the surplus is exported, in the form of dried prunes.

Utilization of plums in the preparation of prunes did not begin until about 1878. The export trade in this fruit was started shortly thereafter, and by 1883 had become quite flourishing. About this time, shipments to the United States began, and that trade prospered until 1895, when the production in California and Oregon was great enough to meet American requirements. Now Serbian and Bosnian prunes compete with American prunes on foreign markets.

It is stated that the acidity is intermediate between that of the French prunes grown in the Santa Clara Valley of California and that of the Italian prunes grown in the vicinity of Salem, Oregon. In appearance the Serbian and Bosnian prunes are inferior to American-grown prunes, as they average smaller in size, are not as regularly dried, and differ greatly in variety and in quality.

The normal annual exports of dried prunes average from 40,000 to 45,000 metric tons. About 10,000 to 15,000 metric tons are exported in cases and the remainder in bags. However, exports are usually the surplus remaining after the domestic requirements of plums for slivovica have been met. The prunes exported in cases are known as processed or "étuvé"; that is, they are steamed and boxed. The prune interests are desirous of processing and boxing all their prunes before exportation, as they can thus prevent losses due to deterioration en route, make their brands known on the markets of the world, command higher prices, and gain for their country the benefits accruing to such an industry. Some countries, particularly Germany, which dominates the European prune distribution, have imposed such high import duties on processed prunes that the development of the local processing industry has been handicapped. Eventually the exporters in the Kingdom will have to develop direct contacts with the actual consuming countries. Some progress has already been made in this direction.

The plum-growing belt, which has a breadth of about 150 kilometers, lies immediately south of the Save River and extends, in

length, from Brod to the Morava River. Among the principal shipping points are Brčko, Šabac, Belgrade, Ložnica, Kragujevac, Valjevo, Arandjelovac, and Čačak.

The number of trees, the production, and the exportation of prunes are shown in the following table:

Years	Number of trees	Plum crop	Exports of prunes
		Metric tons	*Metric tons*
1920	56, 824, 891	661, 198	21, 258
1921	59, 023, 768	800, 096	38, 377
1922	60, 958, 902	849, 032	30, 443
1923	56, 268, 383	893, 664	66, 392
1924	49, 357, 220	322, 026	19, 940
1925	52, 567, 655	950, 230	34, 542

The fluctuations in the number of trees is believed to be due to revision of estimates rather than to any considerable change in actual conditions. Some new trees should begin bearing within a year or two. One authority predicts that prune exports will double within 10 years.

A great part of the prune crop is sold in "mala" (small) garnitura or "velika" (large) garnitura lots. A velika garnitura consists of four carloads (one carload equals 10 metric tons) comprising one carload each of 70/80s, 80/90s, 90/100s, and 100/120s. A mala garnitura consists of one carload each of 80/90s, 90/100s, and 100/120s.

CHERRIES

The statistics of the Ministry of Agriculture and Waters do not list cherries separately, but sufficient quantities are grown within the Kingdom to supply the domestic consumption. The sour Dalmatian cherry, which takes its name from the Province in which it is grown, is dried and exported in fairly large quantities. In 1924 the exports totaled 442,671 kilos and in 1925 649,941 kilos.

OTHER FRUITS

Other fruits are produced almost entirely for domestic consumption, although during favorable years there is a small surplus of apples for export.

The leading nut crops are walnuts and chestnuts. The walnuts are principally grown in Serbia and Croatia-Slavonia, which together supply 60 per cent of the total yield. There is usually an exportable surplus each year.

Chestnuts are primarily grown for domestic consumption. South Serbia and Croatia-Slavonia supply more than 80 per cent of the total output.

The production of figs is not commercially important, as the total output is consumed within the Kingdom. Dalmatia supplies about 70 per cent of the total yield.

Olives are grown almost exclusively in Dalmatia, which furnishes more than 90 per cent of the total crop. A small quantity of olive oil is exported.

With the careful selection of varieties and the proper attention to the trees, horticulture should become an important industry of the Kingdom.

LIVESTOCK

The raising of livestock is the second industry in the Kingdom, ranking very close to agriculture in the value of its production. It supplies from 25 to 30 per cent of the total exports. The forage crops, meadows, and pastures of the Kingdom furnish adequate feed for the domestic herds, so that the exports of animals and animal products represent practically a net profit to the country. As the per capita consumption of meat and meat products is small, a very high percentage of the total production finds its way to foreign markets.

The World War considerably reduced the number of animals in the territories within the limits of the new Kingdom, and it has not been possible entirely to reconstitute the herds since the armistice. Short corn crops between 1919 and 1923 made the fattening of the swine for slaughter difficult and resulted in the exportation of live hogs instead of pork and pork products.

There has been no census of livestock in recent years, and the only statistics available are estimates prepared by the Ministry of Agriculture and Waters. The figures for 1924, as compared with those for 1910, follow:

Livestock	[1] 1910	1924
Horses, including mules	1,061,000	1,053,875
Horned cattle	5,580,000	3,784,267
Hogs	4,228,000	2,517,955
Sheep	10,802,000	7,618,708
Goats	3,309,000	1,718,368
Total	24,980,000	16,693,173

[1] For regions within the frontiers of the present Kingdom.

Details concerning the livestock in the Kingdom in 1924 are shown below:

Horses, including mules:	
Colts (under three years)	216,021
Mares	452,695
Stallions	25,032
Horses	360,127
Swine:	
Hogs	1,308,778
Boars	61,202
Sows	615,074
Hogs (over one year)	532,901
Goats:	
Kids	430,886
Goats (over one year)	1,287,482
Horned cattle:	
Calves	575,840
Yearlings	627,453
Cows	1,633,206
Bulls	82,329
Oxen	865,439
Sheep:	
Lambs	1,674,664
Ewes	4,880,562
Rams	382,839
Sheep	680,643

HORSES

Approximately 35 per cent of the horses in the Kingdom are found in Croatia-Slavonia, 22 per cent in Bosnia-Herzegovina, 17 per cent in the Voivodina, and 17 per cent in Serbia and South Serbia.

Native horses are typically Turko-Oriental and offer excellent stock for crossing with English, Turkish, and pure-blooded Arabian horses. As a rule the domestic animals are small, inured to hard work, mountain roads, and cold stables, and are resistant to disease.

The Government maintains seven breeding stations, stocked with Arabian, English, and Belgian horses. The English and Arabian blood is for the purpose of developing cavalry mounts and light draught animals. The Belgian brood mares are used to create a type suitable for heavy draught work. The principal breeds commonly found in the Kingdom are:

Posavska.—These horses are light in weight and vary in color from light to dark brown. They are the result of the crossing of Tartar-Mongol stock with Arabian or Turkish breeds. They are primarily employed as draught animals.

Lipican.—This breed is derived from crossing Spanish horses with Arabian or native stock. They are usually white and are good saddle and draught horses.

Nonius.—The horses of this stock are of middle weight, brown or dark brown in color, and are particularly adapted for draught work. They originally came from Hungary and closely resemble English halfbreed stock.

Belgian.—The crossing of native with Belgian stock has produced heavy animals suitable for draught work.

Mules are not numerous and are not an important factor in the livestock situation.

HORNED CATTLE

The horned cattle of the Kingdom may be divided into two classes. Those south of a line drawn from Zaječar on the Bulgarian frontier to the Drina River and thence north along the Save River to the Italian-Slovenian frontier are small, while those north of the line are much larger, as a result of frequent crossing with Swiss and other stock. South of this imaginary line both oxen and cows are used for draught purposes, while the cattle further north are bred for specific uses.

The native stock is descended from the Bos Taurus Primigenus. These animals are characterized by their small size, gray color, short legs, and light weight. They are normally sturdy, and resistant both to inclement weather and to disease. Cattle found on mountain pastures are invariably smaller than those of the lowlands.

Serbia and South Serbia together lead with about 30 per cent, while Bosnia-Herzegovina and Croatia-Slavonia follow with about 25 per cent and 20 per cent, respectively, of the total number of horned cattle.

The principal native types are the Podolska, Kolubara, and Bosnian.

Animals of the Podolska breed weigh from 400 kilos to 700 kilos each and are bred for milk and meat as well as for draught work. This breed is most commonly found in the Voivodina and Serbia.

Kolubara cattle range in weight from 400 to 600 kilos a head. They are good draught animals, furnish excellent meat, but do not give much milk.

The cattle of the Bosnian breed are the smallest of all. They are excellent draught animals, but they are not considered good either for milk or meat.

The native types have been frequently crossed with Swiss breeds such as Simmenthal, Algau, Pinzgau, and Montafon, although English, Dutch, and Hungarian stocks have also been used to some extent. In general the cross breeds are larger, of better quality, and give more and better milk than the native stock. The crossing of native breeds with Hungarian cattle had resulted in large animals especially adapted to draught work.

The Government maintains a number of breeding stations in order to improve the stock.

HOGS

Although swine are fairly well distributed throughout the Kingdom, about 35 per cent of the hogs are in Croatia-Slavonia, 28 per cent in Serbia and South Serbia, and 20 per cent in the Voivodina. The native stock is descended from the Shumadija breed, which takes its name from the Serbian district in which these animals were originally found. The distinguishing characteristics are their long hair and gray color. They fatten quickly, give a high proportion of lard, and are resistant to both climate and disease.

The principal native breeds are the Mangulica, Turopolje, Budjenovac (or Machva), Black Morava, and White Morava.

The Mangulica breed (which derives its name from "Mongol") is a product of the crossing of old Serbian stock with Hungarian hogs. These animals range in color from white to dark gray and have very long hair. They are excellent for lard, but their meat is of indifferent quality.

The Turopolje breed is a branch of the Mangulica family and is dark gray in color.

The Budjenovac (or Machva) breed has been developed by crossing the Mangulica with English Berkshire hogs. These animals have short, curly hair and yield a large quantity of excellent lard.

The Black and White Morava breeds have resulted from the crossing of native stock with Yorkshire hogs.

There are no special breeding farms, but some of the Government agricultural stations are stocked with Yorkshire and Berkshire hogs for breeding. Recently some German swine have been imported for the same purpose.

SHEEP

Sheep are raised for both meat and wool. The latter, however, is usually coarse and suitable only for heavy blankets and carpets.

In Serbia, South Serbia, and Bosnia-Herzegovina each small farmer owns several sheep, which not only supply the wool for home clothes, but also milk for drinking and for cheese making.

About 50 per cent of the sheep are found in Serbia and South Serbia, 22 per cent in Bosnia-Herzegovina, and 10 per cent in Dalmatia.

The characteristics of the principal native breeds are as follows:

The Sjenica has long, straight white wool and is also prized for its meat . It is found in western Serbia.

The Krivovir has long curly wool, and is raised also because of milk and meat. The sheep of this breed are the largest in the Kingdom. The meat is excellent, and the wool is long and white.

The Pirot, Vlaska, Ovce-Polje, Bosnian, and Cigaja breeds are raised primarily for their wool.

In order to improve the domestic stock, the State has imported various foreign breeds, such as the Oxfordshire, Hampshire, and Merinos. The wool of the Marino-Cigaja cross breed is long and silky.

The skins of slaughtered sheep and lambs are exported or else treated in local tanneries.

No statistics of wool production have been compiled, but the total clip in 1924 is estimated at about 13,000,000 kilos. Full-grown sheep yield about 2 kilos each and lambs about 0.75 kilo each, but a large proportion of the latter are slaughtered before being sheared.

GOATS

Goats are raised primarily for milk. Few of them have been crossed with imported angora, but as a rule the clip is unimportant. Forty-five per cent of the goats are in Serbia and South Serbia, 35 per cent in Croatia-Slavonia, and 10 per cent in Dalmatia. Goatskins are an important article of export.

POULTRY

The raising of poultry is an important industry. In 1924 the numbers of fowls in the Kingdom were as follows:

Chickens	12, 610, 891
Ducks	800, 843
Geese	918, 469
Turkeys	601, 647

CHICKENS

There are two distinct types of native stock, one resembling the coucou-maline breed and the other the German baldnecks. Orpingtons, Rhode Island Reds, Wyandottes, Plymouth Rocks, and Leghorns have been imported, but these constitute only a very small percentage of the total. The scientific crossing of native chickens with foreign breeds has never been practiced to any considerable extent. The native breeds are resistant, and fair layers. The average number of eggs laid annually per hen is from 65 to 70, as compared with from 70 to 80 in the United States.

GEESE, DUCKS, AND TURKEYS

The raising of geese and ducks is largely centered in the Voivodina. The Emden breed of geese and the Pekin and Rouen breeds of ducks are the most widespread.

The principal breeds of turkeys are the Italian white and the American bronze.

METHODS OF RAISING POULTRY

Every farmer in the Kingdom raises poultry for his own needs and for sale within the vicinity. The fowls receive no special care, but as they have the run of the entire farm they are easily able to maintain themselves on waste material. In the Voivodina, however, there are a number of large farms for fattening poultry. These buy fowls from the small farmers, fatten them for several weeks, and export them, principally to the markets of Italy, Austria, Switzerland, Germany, and England. Subotica is the center of this industry.

SALES ABROAD

About two-thirds of the poultry sold abroad is dressed but not drawn. Such shipments are made in refrigerating cars.

The commercial importance of poultry raising is indicated by the exports:

	1923	1924	1925
Poultry:	*Metric tons*	*Metric tons*	*Metric tons*
Live	1, 906	1, 631	1, 250
Dressed	3, 861	2, 498	4, 069
Eggs	17, 241	20, 129	27, 225

APICULTURE

Climatic conditions and the large areas of meadows are both conducive to bee culture. The hives in use, however, are for the most part so primitive that the production of honey is far below normal.

The bees most commonly found in the country belong to the Apis Melifax Carniolana species, and because of their world-wide reputation are exported in fairly large numbers.

A large majority of the beekeepers of the Kingdom belong to regional apiary societies which are endeavoring to modernize both the equipment and the methods used in this potentially important industry.

According to official statistics there were 533,408 hives in the Kingdom in 1921, of which 123,719 were fitted with removable frames and 409,689 were of very primitive types. The number of hives had increased by the close of 1925 to about 600,000, of which about 30 per cent were in Serbia, 20 per cent in Croatia-Slavonia, 15 per cent in Bosnia-Herzegovina, and 12 per cent in Slovenia. The average yield of honey per hive is placed at 10 kilos, making the total production about 6,000,000 kilos. It is said that if the hives were modernized, the output of honey could be increased to 20 or even 30 kilos per hive. The production of wax averages about 0.5 kilo per hive; consequently the total annual output is approximately 300,000 kilos.

The production of honey is greater than the domestic consumption. The exports totaled 24,468 kilos in 1923, 105,367 kilos in 1924, and 40,365 kilos in 1925.

The ouput of beeswax, on the other hand, is inadequate for domestic requirements, as the imports considerably exceed the exports. These latter totaled 1,148 kilos in 1924 and 4,510 kilos in 1925, while the imports amounted to 43,553 kilos in 1924 and to 42,296 kilos in 1925. Beeswax is used chiefly for the making of church candles.

FORESTRY

The forest industry ranks first in the Kingdom as regards capital invested, and third as regards exports. It is estimated that more than 1,000,000,000 dinars, or about one-third of the capital invested in industrial enterprises, are placed in the development of forest products.

AREA AND DISTRIBUTION OF FORESTS

The forest area covers 7,586,026 hectares, or about 30.5 per cent of the entire area of the Kingdom. The following table shows, by Provinces, the total area of the Kingdom and the total forest area:

Provinces	Total area of Province	Forest area	Provinces	Total area of Province	Forest area
	Hectares	*Hectares*		*Hectares*	*Hectares*
Serbia and South Serbia	9,568,600	1,763,654	Slovenia	1,662,646	687,408
Voivodina	1,970,200	101,471	Bosnia-Herzegovina	5,119,900	2,698,557
Montenegro	966,800	507,154			
Croatia-Slavonia	4,254,023	1,433,830	Total	[1] 24,850,128	7,586,026
Dalmatia	1,307,959	393,952			

[1] The area of the Kingdom as determined by the forest service does not agree exactly with that given by the Ministry of Agriculture and Waters.

The forest area includes 825,610 hectares of "karst" lands which are denuded of trees, and 546,443 hectares of surfaces such as roadways, rivers, and other small spaces which are not wooded. The total effective forest area is therefore 6,213,973 hectares. No data are available on the quantity of merchantable timber.

Despite this vast forest area, full development and proper utilization of the production are impossible because of the want of adequate transportation facilities, for the construction of which the necessary capital is lacking.

The small forest area in the Voivodina is not surprising, as the richness of the soil and the flat topography of the country have naturally favored its development as a grain-producing region. Northern Serbia is well wooded, but in South Serbia (Macedonia) the forests are few, because of their destruction during the period of Ottoman domination. The Turk, fully realizing the value of forests as a place of concealment for the hostile Serbian patriot, placed a high tax on trees and in every way favored the devastation of the forests. The Dalmatian coast, including western Croatia and western Montenegro, is also largely barren, as the woods were stripped to furnish material for the building of Venice and of other towns on the Adriatic littoral.

OWNERSHIP OF FORESTS

The State owns 3,619,566 hectares, or 47.7 per cent of the forest lands; communities, municipalities, monasteries, and other public organizations, 1,442, 854 hectares, or 19 per cent; and private individuals or companies 2,523,606 hectares, or 33.3 per cent. In Bosnia-Herzegovina about 75 per cent of the forests are State-owned, while in Slovenia the State owns less than 3 per cent and in Dalmatia less than 1.75 per cent. The largest private-owned forests are in Croatia-Slavonia, Slovenia, and the Voivodina. Of the private forests, 92.8 per cent have a total area of 10 hectares or less, and 6 per cent an area of from 11 to 50 hectares.

ORGANIZATION OF FORESTRY SERVICE

The Ministry of Mines and Forests was established by the Royal Decree of December 18, 1918, and organized in accordance with the provisions of two later decrees dated March 15, 1919, and April 27, 1921, which stipulated that the ministry was to be the highest administrative or supervisory authority in the Kingdom in all matters pertaining to forests and mines. The General Administration of Forests, a part of this ministry, directs the control of the forests in the country through provincial forestry agencies, of which there are three in Croatia-Slavonia (at Zagreb, Vinkovci, and Sušak) and one each in Slovenia (Ljubljana), Voivodina (Apatin), and Bosnia-Herzegovina (Sarajevo). Originally the forests of Serbia and Montenegro were under the direct control of the ministry, but at the present time three agencies (at Čačak, Aleksinac, and Skoplje) are being organized. Dalmatia is placed under the forest agency at Ljubljana.

There is no uniform forestry law for the entire Kingdom, and the forestry service in the various Provinces administers the laws which were operative at the time of the union. The pre-war Serbian law of 1893 applies to Serbia and Montenegro, the Austrian law of 1852 to Slovenia, the Hungarian law of 1879 to the Voivodina, while

Bosnia-Herzegovina is administered under a special law passed in 1890, applicable to that one Province.

The "law of general autonomous administration" which was promulgated in 1922 did not accept the views expressed in the decree for the organization of the Ministry of Mines and Forests, that the forestry administration be conducted through the regional agencies and that these be both the administrative and supervisory authorities, as was the case in pre-war Serbia, but provided that the administrative authority be extended only over State-owned forests and that in the case of municipal forests there should be a special agency attached to the political administrative authorities (prefectures). Such a system existed in Slovenia, Croatia-Slavonia, and Dalmatia, where there existed as intermediate authoritites the referees (experts) attached to the prefectures and as lowest authorities the experts attached to the subprefects.

SERBIA AND MONTENEGRO

In Serbia and Montenegro the forestry service has full administrative authority over State-owned forests and has police and supervisory authority over the other forests. The service is entirely independent of the political administration, and the forestry districts are not identical with the political subdivisions.

SLOVENIA AND DALMATIA

In these two Provinces there is a dual control over the forests. State forests are administrated by a central forestry service directed from the Ministry of Mines and Forests. Community-owned and privately owned forests are supervised by special forestry experts who are attached to various prefectures and who act under the direction and instruction of the prefects. Both the central and local forestry agents have full police powers within their jurisdiction.

In Dalmatia there is no special administration of State forests, and these are administered by the political forest experts.

CROATIA-SLAVONIA

The State-owned forests are administered through three regional forest agencies, while the administration of community forests is separate and comprises eight autonomous agencies which are directly subordinate to the Ministry of Mines and Forests and which are independent of the three regional agencies. The administration of other communal forests, as well as of all forests belonging to the agricultural cooperatives is entirely autonomous. These have, however, transferred their administrative authority to the political forest experts. These latter, therefore, perform a double service—the administration of communal forests and the policing and supervision of all other forests.

Privately owned forests are administered in the same way as in Slovenia and Dalmatia.

VOIVODINA

Until the union, the Voivodina had the Hungarian triple forestry system—that is, separate State administration of State-owned forests;

administration of communal forests, independent of political authorities; and the forestry police and supervisory authorities. At present, pending the introduction of the provisions of the law of autonomous administration, the entire administrative and supervisory service has been concentrated in the hands of the administrators of State forests.

BOSNIA-HERZEGOVINA

As the communal forests have not yet been separated from the State-owned forests, the administration is uniform for both. However, there are special forest agencies in charge of large State forests, the agents being at the same time experts, attached to the political authorities. Likewise, the small State forests are usually under the jurisdiction of the experts attached to the political authorities. At present, there are no provincial referees, and so both the administrators of State forests and the experts attached to the county prefectures are directly subordinate to the forest agency at Sarajevo.

Regulations governing the exploitation and supervision of private forests in Bosnia-Herzegovina are identical to those in Croatia-Slavonia.

CUTTING OF TIMBER

In Serbia and Montenegro permits must be secured for the felling of trees in State-owned forests, but no permit is required in the case of other forests, except in those places where the felling of trees would be contrary to public interests. Thus the felling of timber on the following places, even if privately owned, is subject to State control: (1) On mountain chains and slopes which are exposed to strong winds; (2) on rocky hills, slopes, or heights where the forests serve to prevent sudden drainage or the cutting away of the soil in order to prevent inundations and landslides; (3) on all unstable soil, in swamps and especially in places with shifting sands. All such places are especially noted and the authorization to fell timber is not granted until young trees have been planted and have reached sufficent growth to afford the necessary protection. Otherwise full liberty is granted to owners of private forests.

In the other Provinces of the Kingdom, permits to fell trees in the State-owned or other forests must be obtained from the appropriate forestry authorities.

Reforestation must in all cases take place within a period of five years.

The project of the forestry law for the entire Kingdom has been drawn up, but has not been presented to the Parliament.

CLASSIFICATION OF TREES

Deciduous or hardwood trees cover 4,976,062 hectares, or 70.6 per cent of the total forest area; coniferous or softwood trees, 828,999 hectares, or 11.8 per cent; and mixed forests, 1,234,522 hectares, or 17.6 per cent.

The Provinces where softwoods predominate are Slovenia, Western Bosnia, and Montenegro. Hardwoods form 100 per cent of the forests of the Voivodina and the major part of the forests of Croatia-Slavonia, Dalmatia, Serbia, and South Serbia.

Of the total area in hardwood trees, beech forests cover 1,642,506 hectares, oak forests 718,956 hectares, and mixed forests of beech, oak,

maple, chestnut, ash, willow, elm, locust, and other trees 2,614,600 hectares. The principal region of oak forests is in Croatia-Slavonia, along (but north of) the Save River.

Of the softwood trees, pine, spruce, and fir are the most prevalent.

ANNUAL GROWTH AND ANNUAL CUT

The rate of annual growth is difficult to compute accurately, as it depends not only upon the kind of trees, but also upon their age and upon the regions in which they grow. The annual increase of conifers is estimated, by the leading authorities, at from 3 to 4 cubic meters per hectare. The total annual increase is placed at 14,000,000 cubic meters.

CONSUMPTION AND USE

About 1,000,000 cubic meters of softwoods are consumed as fuel. The remaining 4,000,000 cubic meters are made into beams, boards, staves, and forms of construction lumber or else are used in the production of cellulose (pulp). Thirty per cent of the oak felled is for firewood, but, with the growing use of modern machinery, there is a tendency to reduce the quantity so consumed and to increase the output of lumber. Oak logs are largely used for the manufacture of tannin, while the saw-logs are made into planks, parquetry, veneer, staves, railway ties, lumber for furniture. Eighty per cent of the beech wood is consumed as fuel, and the rest is employed for industrial purposes. As in the case of oak there is a strong tendency to reduce the amount of beech used for fuel, as it can be more remuneratively used for timber or railway ties. Elm, ash, and maple are all used for furniture making. The locust is much planted in the Voivodina and in South Serbia for retaining soil on slopes. The willow, which is largely found in the Voivodina, is used for wickerwork and chestnut for tannin, furniture, and miscellaneous general needs.

The domestic consumption is placed at 1 cubic meter per capita, making a total of about 13,000,000 cubic meters a year.

EXPLOITATION

The exploitation of forests is largely developed near centers or towns having good means of communication, while in the other sections of the country distant from adequate road, water, or railway transportation the woods remain practically untapped. The Slavonian oak, which grows in regions well served by both water and railway transportation, is reported to be diminishing so rapidly that unless active measures are taken to protect the existing forests against over-cutting and the ravages of disease, it is feared this national asset will lose its importance.

As a rule the State-owned forests are leased for long terms to private companies for exploitation. For a while there was an effort on the part of the State to exploit its own forests, and each budget carried credits for working capital for this purpose. Recently, however, the policy has changed, and the Government is now seeking to lease important forest areas to private concerns. The financial results of the State's exploitation of its own forest domains have been as follows: 1924–1925, 186,717,653 dinars; 1925–1926, 110,757,484 dinars.

As the State is not able to exploit the State-owned forests to their fullest capacity at the present time, it is being urged that the concessions for the exploitation be so limited that the concessionary will be obliged to observe the modern principles of forest preservation. In the case of community-owned forests the continuity of exploitation is more closely carried out than in the case of the Government-owned lands. The smaller units in such cases make for a better control of cutting and reforestation than is the case with the more widely spread State forests. The exploitation of private forests depends almost entirely upon the personal initiative and intelligence of the owner.

REFORESTATION

With the exception of a special office at Senje charged with the afforestation of the Croatian karstlands, these services are under the control of the political or forestry authorities. Natural reforestation, which furnishes the best means of replenishing the forests, requires very skilful attention to the selection of cuttings and to the care of young trees. But the provisions of the law are not strictly enforced, and the woodlands are, in many places, being sacrificed for the immediate profits of ill-advised exploitation. Artificial reforestation is little employed in the Kingdom.

LUMBER INDUSTRY

The lumber industry is closely associated with forest cutting, as the exploitation or logging companies, of which there are about 250 in the Kingdom, not only fell the trees, but cut the timber into semifinished and finished products. These concerns either exploit their own private forests or use timbers from State forests obtained on long-term contracts from the Government. In Croatia-Slavonia practically all of the important firms own the forests which they exploit, while in Bosnia-Herzegovina they work State forests. Formerly such contracts called for flat annual payments, but the more recent contracts provide for the payment of a percentage of the gross value of the wood.

In addition to these large concerns there are a number of sawmills, which as a rule obtain their wood by purchases from the exploitation companies, as they are not usually in a position to own woods or to obtain forest concessions. The uncertainty as to the sources of raw material renders the sawmill industry very precarious, and it has been suggested by experts that some arrangement be reached whereby the mills can exploit the State forests under Government management. So far, there is still no indication of any steps being taken in this direction. There are 302 large sawmills and 2,376 small sawmills in the Kingdom. The latter are usually driven by small water wheels, while the former are steam driven. The small mills produce material for domestic needs, while the large ones work almost entirely for exportations. In Croatia-Slavonia the big mills are equipped for cutting hardwood, while those in Bosnia and Slovenia are arranged to handle fir and other softwoods. The Slovenian plants normally have from 10 to 12 gangsaws, while the Bosnian ones have from 16 to 20. The large mills are modern and are equipped with the necessary auxiliary machinery to expedite the handling of lumber. One mill in Bosnia is capable of an annual output of 400,000 cubic

meters of timber, or 240,000 cubic meters of boards, while another produces yearly about 100,000 cubic meters of timber and 10,000 cubic meters of planks for boxes. One plant in Croatia-Slavonia is capable of handling 70,000 cubic meters of timber a year.

In Slovenia and Serbia the capital is almost entirely domestic, while in the other Provinces it is estimated that foreign capital finances 50 per cent or more of the undertakings. The following table shows the distribution of the large and small sawmills by provinces:

Provinces	Large	Small	Provinces	Large	Small
Bosnia	30	120	Serbia and Macedonia	30	240
Montenegro	4	10	Voivodina	7	
Dalmatia					
Croatia-Slavonia	100	150	Total	302	2,376
Slovenia	131	1,856			

About 70,000 horsepower is developed by the engines in the timber and lumber industries, which furnish employment to more than 100,000 workers.

RÔLE OF TRANSPORTATION IN FORESTRY DEVELOPMENT

Means of transportation play a more important rôle in the development of the forest resources of the country than in the case of agriculture or livestock.

Some lumber and firewood from points in Bosnia adjacent to the Drina River are floated in rafts down that stream into the Save and thence to Belgrade. This, however, is an exception, as river transportation is not an appreciable factor in the distribution of forestry products. As is natural, the lumber industry has been more highly developed in Bosnia-Herzegovina, Slovenia, and Croatia-Slavonia than in the other Provinces, not only because of the extent of the wooded areas but also because of their proximity to the seaboard and the demand for wood, in pre-war times, in the other sections of Austria-Hungary. Furthermore, the Bosnian narrow-gauge railway system passed through regions rich in forests while the railways in Slovenia and Croatia-Slavonia afforded ready transportation to the ports of Trieste and Fiume and to the northern centers of the Dual Monarchy.

The gradual development of the Bosnian timber industry brought as a necessary corollary the construction of private lines to tap the forests and distribute the output. Consequently two important railways in Bosnia were built by the lumber interests.

Both of these railways, known as the Zavidovići and Steinbeiss lines (see p. 100) are, like the Bosnian narrow-gauge system into which they feed, of 76-centimeter gauge. The former has 114 kilometers of lines and 80 kilometers of spurs tapping the forest lands, while the latter has 337 kilometers of line and 400 kilometers of feeders. Both are now owned by the State but are leased to lumber interests. These railways furnish transportation for timber from the forests to the seaboard, but they still fail to reach all of the important wooded areas in the regions.

The following table shows the forestry transportation facilities in the several Provinces:

Provinces	Steam	Gravity railways	Cable	Forest roads	Floating
	Kilometers	*Kilometers*	*Kilometers*	*Kilometers*	*Kilometers*
Serbia			1	80	2
Voivodina				25	
Montenegro				30	
Croatia-Slavonia	117	70	1.2	377	3
Slovenia	58.9	20	25.2	200	33.8
Bosnia and Herzegovina	1,300	50	7	120	8
Total	1,475.9	140	34.4	832	46.8

In addition to the transportation means listed above there are 116 kilometers of tracks for horse-drawn cars and 7.5 kilometers of suspension railways.

Not only are the transportation facilities insufficient for exploiting the forests, but they are even more inadequate in the matter of the distribution of the output. The railway lines, as a rule, carry the wood and lumber to Adriatic ports or to the northwest; consequently, construction wood and fuel for the Voivodina and Belgrade are imported in fairly large quantities, as rail transportation under present conditions makes domestic wood too expensive in those regions.

The principal lumber ports of the Kingdom are Sušak and Šibenik, both of which are equipped to handle this class of traffic.

The future of the forest industry depends in large measure upon the development of the railways. The construction of the proposed Belgrade-Adriatic railway would unquestionably open up wooded regions hitherto untapped and furnish an outlet to the seaboard for lumber and lumber products. The building of extensions to the Bosnian narrow-gauge network would also give impetus to this industry.

EXPORTS OF WOOD AND WOOD PRODUCTS

Wood and wood products rank third in the export trade of the Kingdom, being exceeded only by agricultural products and animals and animal products. The export trade in such articles steadily increased between 1921 and 1924, but in 1925 it declined considerably because of the high exchange value of the dinar, which rendered the marketing abroad of wood and wood products exceedingly difficult. The following table shows the percentage of forestry products in the total export trade of the Kingdom during recent years:

Years	Volume	Value
	Per cent	*Per cent*
1923	43.7	20.0
1924	44.3	20.4
1925	33.8	16.0

Timber for industrial purposes, the bulk of which is in the form of logs, constitutes about two-thirds of the volume and about four-fifths of the value of such exports. Lesser items are firewood, oak

and beech ties, parquetry, veneer, excelsior, boxes, crates, charcoal, and a general miscellany of unmanufactured articles of wood.

The export figures for 1923, 1924, and 1925 are shown below:

Classes	1923		1924		1925	
	Metric tons	Value in dinars	Metric tons	Value in dinars	Metric tons	Value in dinars
Firewood	351, 903	151, 338, 689	508, 798	166, 656, 532	304, 559	76, 697, 505
Construction wood	849, 542	1, 289, 563, 366	1, 046, 292	1, 620, 156, 622	1, 051, 225	1, 118, 720, 734
Ties, beech and oak	60, 519	55, 483, 939	115, 847	54, 343, 102	154, 362	72, 825, 035
Articles of wood	59, 283	116, 572, 928	63, 456	102, 582, 628	65, 312	148, 690, 694
Total	1, 321, 247	1, 612, 958, 922	1, 734, 393	1, 943, 738, 884	1, 575, 458	1, 416, 933, 968

While the decline of the exports during 1925 is of serious import to those engaged in the exploitation of the forest, it should have a favorable effect upon silviculture, as there is no longer the same incentive for overcutting in areas now available to transportation. This period of respite, which should only be temporary, may afford time for the inauguration of more scientific methods of cutting and reforestation in accessible areas.

About 70 per cent of the exports go to Italy, 16 per cent to Hungary, 4.5 per cent to France, and 2.5 per cent to England.

IMPORTS OF FOREST PRODUCTS

Despite the large production of timber in the Kingdom, the distribution of forestry products is so handicapped by the cost of domestic transportation that imports from adjacent States are necessary to supply the needs of certain sections, principally those in the northeastern part of the Kingdom.

During 1924 the imports were valued at about 42,983,055 dinars, of which 15,364,065 dinars were for firewood, and 27,618,990 for ordinary construction lumber.

Rumania supplied practically the entire quantity (15,132,550 dinars) of such fuel and Czechoslovakia nearly all (26,519,920 dinars) of the construction lumber.

MINING AND MINING INDUSTRIES

EARLY MINING ACTIVITY

The only Provinces in which mining has not been developed to any great extent are the Voivodina and Montenegro.

In Serbia there have been three distinct periods of mining activity. The first period was during the Roman occupation, which lasted from the first to the fourth centuries A. D. During this period, when the region was raised to a high level of security and prosperity, the exploitation of the metallic minerals, notably the ores of gold, copper, and iron, was carried on with great zeal.

The second mining period coincides with the existence of the Serbian Empire (1168–1496). The industry was especially important under King Vladislav (1233–1242) and his brother, Urosh Veliki (1242–1276). The metals of most importance during this period were gold, silver, and copper. Of the mines that were famous during that period, the

only one that is highly productive at the present time is the Bor copper mine in northeastern Serbia.

After the Turkish invasion (1496) mining rapidly declined and remained unimportant until recent times.

The history of mining in Bosnia is very similar to that in Serbia except that iron ores and salt were the principal minerals exploited during both the Roman period and the Middle Ages, and these same two minerals, together with coal, hold first place in Bosnia at the present time.

Gold, silver, copper, and iron (the minerals most sought after in ancient times) do not occur in Slovenia, Croatia-Slavonia, or Dalmatia, and hence there is no ancient period in the history of mining in these Provinces. Mining began in Slovenia about the 15th century with the opening of the lead mines at Pliberg and the coal mines in the Save and Drave Valleys. These mines are still important. In Croatia-Slavonia coal forms the only mineral deposit of any consequence, and its extraction began comparatively recently.

The principal mineral resources of Dalmatia are cement marls and bauxite deposits. Since these are minerals known only to modern industry, Dalmatia's mining history is almost wholly restricted to the recent period.

OWNERSHIP OF MINES

Up to the present, no mining law applicable to the whole of the Kingdom has been enacted, although such a law, based primarily upon the Serbian law, has been drafted.

The principal features respecting the ownership of mines, or rather of mining concessions, in the Serbian law are as follows:

All the minerals in the State, whether found on private or public land, are the property of the State.

Preliminary exploration ("prospecting") for minerals may be conducted only after a permit has been obtained from the Minister of Mines.

In case the permit is granted to prospect on private land, the prospector must indemnify the owner of the property for whatever loss the owner may sustain by reason of prospecting operations.

If minerals are discovered in quantity and quality meriting exploitation and if adequate capital is available for developing a mine, a mining concession may be granted. In the application, it is necessary to present to the Ministry of Mines a plan of the projected operations.

The concession right includes the privilege of mining all types of mineral met with on the concession. If the concession is on State lands, the holder has the right to employ, without extra payment, "natural forces," such as rivers, streams, or waterfalls, and if the mining area includes forest lands, all the timber is at the disposal of the concession holder free of all charge provided it be used exclusively for mining purposes.

A concession may be withdrawn if the work is not carried on continuously. Provisionally, the concession is granted for 50 years. After 15 years of continuous working and the compliance with all other legal requirements, the concession is confirmed for the full period of 50 years.

During the validity of the concession, the Ministry of Mines requires an annual report, which includes plans of further proposed extensions.

Instead of granting mining concessions, the State itself may operate the mines. This is frequently done in the case of coal and iron mines.

RAILROADS AS A FACTOR IN MINING

Railroads and other means of communication are treated elsewhere in this volume, but as the development of the mining industries is so closely dependent on transportation facilities, a brief summary of railroad conditions is given here.

As regards both internal and international communications unusual difficulties are encountered. Largely because of these difficulties the mineral resources (especially minerals of the bulkier sort, such as coal, iron, bauxite, manganese, and chromium) have never been adequately developed.

The best line of communication, one that has served since earliest historical times, follows the valley of the Save River, westward, to its confluence with the Danube at Belgrade. It continues thence southward along the Morava Valley to Niš (Nish). From Niš the line divides; one branch, following the valley of the Nišava to Sofia, continues thence to Constantinople; the other branch, after crossing a low water shed into the Vardar basin, continues southward to the port of Saloniki and to Athens.

The so-called international train service between Paris and Constantinople, or between Paris and Saloniki, follows this natural line of communication. The Provinces traversed by this main-line railway are Slovenia, Croatia-Slavonia, and Serbia. Most of the smaller lines feed into this main line, which is standard gauge. The branch lines, however, are frequently of 76 centimeters and 60 centimeters gauge.

The transshipment from one gauge to another not only adds greatly to the delay and uncertainty of shipment but also increases the cost very materially.

Comparatively few mines have standard-gauge railway connection with the main line. In Slovenia and Croatia-Slavonia, however, all the branch lines are of standard gauge, and the Slovenian coal mines consequently enjoy a very great advantage over those of Bosnia and Serbia.

There is but one standard-gauge branch line in Bosnia, with its terminal at Banja Luka. This line serves the iron mines at Ljubija. The majority of the Bosnian mines are served by small industrial lines which feed into the main Bosnian line (Sarajevo-Brod), which is of narrow gauge (76 centimeters) and joins the international line at Brod. Owing to the necessity for transshipment, the congestion of cars at Brod is always very great, seriously handicapping the Bosnian mines.

The branch lines in Serbia are of 76 centimeters and 60 centimeters gauge. The Serbian mines have one advantage over the Bosnian mines, in that the branch lines on which they are situated are usually quite short.

In Dalmatia, the most valuable mineral product, cement marls, is found very close to the sea, but such minerals as bauxite and asphalt lie further inland, and as Dalmatia is very poorly served by railways, these inland mines are scarcely developed.

In addition to the railway difficulties, there should be mentioned the shortage of locomotives and cars and the poor condition of the rolling

stock. The output of the coal mines is frequently limited by the number of cars placed at the disposal of the mines. The Ljubija iron mines experience similar difficulties.

THE LABOR FACTOR

The South Slavs are by taste and inclination an agricultural people, and neither mining nor metallurgy appeals strongly to them. Hence it is noted that the engineers and directing personnel in these establishments are usually foreigners or of non-Slavic origin, and the miners are of a nonprofessional class. As a rule, they are peasants who drift into the mines for a short season and then go back to their farms. The "labor problem" in the mines and smelters is an acute one, resulting not from the agitation of labor organizations, as in highly industrialized nations, but from the difficulty of securing a sufficient number of trained workers. Often the miners remain only a few weeks or at most a few months, making the "turnover" enormous.

Labor legislation has in general endeavored to favor the condition of the workingman. Laws affecting the laborer's working and living conditions, his right to form unions, the length of the working day, etc., have been enacted. The present working day is 8 hours and the average mine working year is 280 days.

PRINCIPAL COMMERCIAL MINERALS

The principal commercial minerals of the Kingdom may be classified as follows:

1. *Metallic minerals.*—Ores of copper, lead, iron, gold, silver, aluminum, molybdenum, manganese, chromium, and antimony.
2. *Nonmetallic minerals.*—Sulphur, asphalt.
3. *Fossil fuels.*—Black coal, brown coal, lignite.
4. *Useful rocks.*—Marble, limestone, granite, cement marl, gypsum.
5. *Mineral wells.*—Salt wells, petroleum wells.

PRODUCTION

The following table shows the output of the mines and metallurgical industries during the calendar years 1923, 1924, and 1925, so far as such data are available:

MINE OUTPUT

Minerals	1923	1924	1925
	Metric tons	*Metric tons*	*Metric tons*
Coal	4,104,766	4,189,294	4,152,126
Copper, ore	[1] 136,218	[2] 147,691	176,058
Lead, ore	57,194	64,117	78,549
Salt:			
From wells	41,626	48,864	48,032
Sea	7,245	6,022	6,467
Iron, ore	244,618	334,547	132,834
Bauxite	25,828	18,485	79,032
Pyrites	25,835	26,306	38,988
Zinc, ore	617	62	535
Antimony	546	1,726	579
Manganese, ore	5,145	4,570	2,716
Chrome, ore	165	300	12,160
Asphalt			286

[1] For fiscal year ended June 30, 1924. [2] For fiscal year ended June 30, 1925.

METALS

Metals	1923	1924	1925
	Metric tons	*Metric tons*	*Metric tons*
Iron	23,026	14,869	3,494
Steel		12,900	[1] 90,000
Copper	[2] 7,761	[3] 7,132	7,301
Lead, crude	9,620	13,257	10,956
Zinc	1,947	2,946	2,232
Antimony			63
	Kilos	*Kilos*	*Kilos*
Gold	248	228	233
Silver	[2] 1,008	[3] 927	949

[1] Estimated. [2] For fiscal year ended June 30, 1924. [3] For fiscal year ended June 30, 1925.

COAL

The coal production, although still insufficient to meet local needs, is by far the most important mineral resource of the Kingdom. Workable deposits are found in nearly all the Provinces. The greater portion of the coal is of inferior quality, as is evident from the fact that of the 4,104,766 metric tons extracted in 1923, 72.4 per cent was brown coal, 24.3 per cent was lignite, and 3.3 per cent was black coal (bituminous), while of the 4,189,294 metric tons produced in 1924, 74.5 per cent was brown coal, 22.4 per cent was lignite, and only 3.1 per cent was black coal.

The production of these three classes of coal is distributed among the various Provinces as follows:

Kinds, and sources	1923	1924	Kinds, and sources	1923	1924
Black coal:	*Metric tons*	*Metric tons*	Lignite:	*Metric tons*	*Metric tons*
Serbia	134,644	128,904	Serbia	231,506	220,836
Slovenia		842	Dalmatia	3,101	4,192
Bosnia-Herzegovina	1,623	1,887	Slovenia	205,106	167,130
			Croatia-Slavonia	211,579	176,458
Total	136,267	131,633	Bosnia-Herzegovina	347,545	370,015
			Total	998,837	938,631
Brown coal:					
Serbia	375,747	347,134			
Dalmatia	98,591	124,509	All coals: Grand total production	4,104,766	4,189,294
Slovenia	1,489,851	1,729,880			
Croatia-Slavonia	190,357	172,462			
Bosnia-Herzegovina	815,116	745,045			
Total	2,969,662	3,119,030			

BLACK COAL

With the exception of the output of the recently opened Orle mine in Slovenia, which amounted to 842 metric tons in 1924, and of the output of the Majevica mine in Bosnia-Herzegovina, which totaled 1,623 metric tons with 38 workers in 1923 and 1,887 metric tons with 40 workers in 1924, the entire production of black coal comes from Serbia. The black coal averages about 7,000 calories. The output of the leading black-coal mines in Serbia during 1923 and 1924, as well as the average number of workers in each mine during 1923, was as follows:

Black-coal mines in Serbia	1923		1924, metric tons
	Metric tons	Workers	
Dobra Srecha	35,762	458	18,015
Podvis	10,970	151	12,182
Rtanj	46,696	600	55,691
Srpski Balkan	7,154	171	10,146
Tresibaba	32,312	400	28,008
Others	1,750	30	4,862
Total	134,644	1,810	128,904

BROWN COAL

All the Provinces of the Kingdom except Montenegro and the Voivodina have brown-coal deposits which are being worked, but Slovenia alone supplies more than 50 per cent of the output.

The richest deposits lie in a chain which begins near Ljubljana (Laibach), in Slovenia, passes close to Zagreb, in Croatia, and ends in the vicinity of Sarajevo, in Bosnia.

Ordinarily this coal is brown in color, although occasionally it is shiny black. But where true black coal always gives a black or greyish "streak" and produces, when crushed, a black powder, this brown coal, even when a shiny black in the lump form, always gives a brown "streak" and, when crushed, a brown powder.

The percentage of sulphur and mineral impurities in the brown coal is relatively high. On burning, the sulphur not only gives an unpleasant odor but also is destructive of fire boxes, engine boilers, etc. Most of this coal, in burning, forms a great deal of ash and much clinker.

The carbon content of brown coal and lignite averages only about 50 per cent, and hence their heating value is comparatively low. These coals contain a very high proportion of moisture, a part of which is readily given up, even when kept in closed storehouses. On losing their moisture, they crumble into small particles or even into fine dust, rendering the coal extremely liable to spontaneous combustion. For this reason it can not be stored for reserve stock. The industries make use of it only because of its abundance and comparative cheapness or because of the difficulty and uncertainty of obtaining an adequate supply of black coal. Brown coal is also unpopular for use in homes, and wood is practically the only household fuel. The brown coal of the Kingdom averages about 5,000 calories.

A tabulation of the most important brown-coal mines, together with their production in 1923 and 1924 and the average number of miners employed in 1923, follows:

Brown-coal mines	1923		1924
	Metric tons	Workers	Metric tons
Serbia:			
Aleksinac	69,382	911	72,187
Bogovina	72,994	900	64,135
Aliksar	1,835	106	3,900
Orašac	3,968	51	3,170
Rakova Bara	20,400	150	28,611

Brown-coal mines	1923		1924
	Metric tons	Workers	Metric tons
Serbia—Continued.			
Resava	96,045	385	71,923
Senj	78,568	1,108	77,460
Sisevac Vrčic	24,806	334	22,324
Others	7,749	141	3,424
Total	375,747	4,086	347,134
Slovenia:			
Zabukvica—			
State	38,357	446	30,136
Private	8,646	73	10,806
Liboje	3,049	35	5,748
Roginska Gorca	2,414	38	5,107
Drobni Dol	2,376	81	2,810
Trbovlje	779,786	4,778	867,000
Hrastnik	199,530	1,090	225,140
Brezno-Hudajama	12,960	466	30,200
Rajhenburg	42,343	977	110,999
Stranice	2,529	51	2,372
Zagorje	189,100	2,036	233,700
Kočevje	96,200	1,022	93.300
Sentjanić	67,690	600	75,236
Leze	14,234	211	18,833
Brezovica	13,670	78	1,209
Others	16,967	252	17,284
Total	1,489,851	12,234	1,729,880
Dalmatia:			
Siverič	85,030	600	124,376
Others	13,561	253	133
Total	98,591	853	124,509
Croatia-Slavonia:			
Vrdnik	86,332	903	68,080
Golubovac (Jelena)	25,509	495	14,223
Golubovica	18,888	500	8,915
Krapina	10,715	435	14,541
Lepovina	11,960	234	8,238
Straža-Bastinci	7,912	111	10,198
Ivanovo Polje	4,954	250	5,342
Baštinica	5,539	55	5,190
Radobaje	9,644	220	25,567
Others	8,904	201	12,168
Total	190,357	3,404	172,462
Bosnia-Herzegovina:			
Zenica	251,540	1,633	208,540
Kakanj	184,219	816	182,487
Breza	130,300	668	111,959
Ugljenik	23,802	402	37,776
Mostar	93,103	454	64,170
Banja Luka	56,371	389	54,684
Maslovare	34,619	230	28,517
Suhača	17,012	137	19,112
Kukavica	2,390	48	6,615
Tuznica	3,311	25	3,190
Dobrljin	8,180	250	9,759
Teslič	9,628	95	17,547
Others	641	13	689
Total	815,116	5,160	745,045

LIGNITE

The production of lignite amounts to about one-third of that of brown coal. As a rule the lignite is more woody in structure than the brown coal, but these low grades of coal merge so closely into each other that seldom is a commercial distinction made between them.

Bosnia ranks first among the Provinces in the production of lignite, and then follow, in the order of their importance, Croatia-Slavonia, Slovenia, Serbia, and Dalmatia.

The following tables show the output during 1923 and 1924, as well as the average number of workers by mines in 1923, in the various Provinces:

Lignite mines	1923		1924
	Metric tons	Workers	Metric tons
Serbia:			
Donja Gorevnica	5,184	69	2,289
Zvezdan	6,276	40	5,721
Ivanovo	1,787	14	3,470
Jeklov	4,093	57	4,548
Klenovnik	46,214	298	32,827
Kostolac	145,756	403	128,032
Barošević	9,936	134	10,405
Others	12,260	198	33,544
Total	231,506	1,213	220,836
Dalmatia: Raduša	3,101	25	4,192
Slovenia:			
Otočac	4,760	35	3,070
Globovo	466	15	1,339
Velenje	199,880	845	162,721
Total	205,106	895	167,130
Croatia-Slavonia:			
Ladanje Donje	21,361	247	26,634
Ivanec	46,235	439	28,282
Konjcina	26,068	296	16,251
Mariatica	14,286	170	9,050
Pitonjača	16,684	270	23,128
Glogovac	10,287	194	10,914
Carevdar	5,350	80	6,310
Tselje-Tuzno	9,303	156	2,365
Poljanica	17,842	194	14,026
Cerevič	8,041	45	5,678
Peklenica	14,360	194	17,293
Others	21,762	201	16,527
Total	211,579	2,486	176,458
Bosnia-Herzegovina:			
Kreka	279,906	1,050	278,393
Bukinje	67,639	282	91,622
Total	347,545	1,332	370,015

EXPORTATION AND IMPORTATION OF COAL

The Kingdom, with its small amount of excellent coal and its considerable quantity of coal of inferior quality, should soon be in a position to provide for its own most urgent needs. Its most critical period, as regards coal, occurred immediately after the armistice when its mines were in a very confused state. In most instances the old management had been replaced, and the mines were manned with new and unskilled workmen. The difficulty was intensified at that time by a great shortage of explosives, gasoline, machine oil, utensils, and machinery. The machinery, long in use and damaged by the handling of inexperienced workmen, proved entirely inadequate.

Although a small amount of coal is exported to neighboring countries, the imports far exceed the exports. For the years 1923, 1924, and 1925 the exports were as follows:

Kinds	1923	1924	1925
	Metric tons	*Metric tons*	*Metric tons*
Black coal	68, 317	32, 841	7, 979
Lignite	71, 364	48, 105	142, 466
Brown coal	24, 875	143, 320	
Grand total	164, 556	224, 266	150, 445

Notwithstanding the increase in the production of coal, the increase in importation has proceeded even faster. The imported coal has all been of the better grades. The coal imports for the years 1923, 1924, and 1925 were as follows:

Kinds	1923	1924	1925
	Metric tons	*Metric tons*	*Metric tons*
Anthracite	34, 830	36, 118	
Lignite, black and brown coal	180, 309	207, 654	(1)
Coke	82, 382	82, 945	(1)
Briquets	10, 130	7, 428	(1)
Total	307, 651	334, 145	545, 745

1 Only the total is now available for 1925.

CONSUMPTION

The consumption of all forms of coal in the Kingdom is about 4,500,000 metric tons annually and is steadily increasing.

The consumption of the domestic production of coal during 1922 and 1923 was distributed as follows:

Consumed by—	1922	1923	Consumed by—	1922	1923
	Metric tons	*Metric tons*		*Metric tons*	*Metric tons*
State railways	1, 354, 652	1, 149, 871	Mines	411, 645	398, 459
Other railways		271, 638	Households	354, 658	368, 138
Navigation	157, 398	183, 253			
Industries	1, 476, 345	1, 615, 206	Total	3, 754, 698	3, 986, 565

The largest consumers of coal are the power plants, brick factories, and cement works.

Inasmuch as a very large portion of the coal consumption in modern countries goes toward the maintenance of their industries, the coal consumption per inhabitant in any given country is a very good index of its industrial development. A modification of this statement would, it is true, have to be made in certain instances. Switzerland, for example, without a very great consumption of coal, has been able to develop great industries by means of its vast water-power resources which are converted into electric power. So, also, the Kingdom of the Serbs, Croats, and Slovenes is more highly industrialized than its per capita consumption of coal would indicate—and this by reason of the fact that a considerable portion of fuel is

supplied by the great forests. These forests furnish charcoal for the iron mills and fuel for household use. With this reservation, it is interesting to compare its per capita consumption with that in the United States. The total coal consumption in 1925 was 4,547,426 metric tons or 5,012,628 short tons, giving an annual per capita consumption of about 0.39 short tons. This appears to be a very small amount in comparison with the per capita coal consumption in the United States, which was about 2.20 short tons in 1923.

IRON AND STEEL INDUSTRIES

In every Province are found iron-ore deposits which at one time have had some local importance. At the present time, however, actual production of iron ore is limited to two mines in Bosnia. One of these is at Ljubija and the other is at Vareš.

IRON-ORE MINES

Ljubija mine.—The exploitation of the Ljubija ore body was begun only in recent years. In 1910 the field was carefully prospected under the direction of the Austrian Government. When the field was opened in 1916, the Austrians decided upon the immediate installation of a modern plant with permanent equipment, including an electric power station, air compressor plant, coal bunkers, repair shops, offices, hospital, and houses for workmen.

The ore deposit consists principally of limonite, but at a depth of 60 meters siderite is encountered. The reserves are variously estimated at from 300,000,000 to 600,000,000 metric tons.

A typical analysis of the two classes of ore follows:

Principal elements	Limonite	Spathic iron ore
	Per cent	*Per cent*
Iron	49.12	55.97
Manganese	2.37	2.28
Silica	13.75	7.64
Phosphorus	.161	.23
Sulphur	.054	(1)

[1] Trace.

Six digging machines were installed for removing the "cover." Open-cut work is carried on only in summer; in winter the extraction is done by tunneling. There are five principal workings, but only one of them, the Javornik, is extensively developed. In this working there are 11 main open-cut stages, each about 12 meters high.

The explosive used at the present time is "titanite," which is of domestic manufacture. Cost accounts kept during the summer of 1923 showed that the extraction of each ton of ore required, on an average, 19 centimeters of drilling and 18 kilos of titanite. During the same period, the extraction amounted to about 800 metric tons per day. The number of men employed averaged 580; hence the daily extraction, per man, was a little over 1.25 metric tons. This seems to be a fairly constant factor, as in 1924 the average daily extraction per man was 1.21 metric tons.

The ore from the various levels and tunnels is hauled by electric trams to a central collecting station, whence it is either sent directly to Prijedor or is stored in the coal bunker which holds about 2,000 metric tons.

The railway line connecting the mine with Prijedor is owned by the mine and was built by the Austrians at the time of the erection of the mine plant. It is a narrow-gauge line (76 centimeters) 18.5 kilometers long. Prijedor is on the standard-gauge line between Banja Luka and Zagreb and is also the terminus of a line from Split (Spalato) on the Adriatic coast. The distance from Prijedor to Split is 374 kilometers. Of this distance the first 243 kilometers are over a very light narrow-gauge line, while the remainder is a standard-gauge line. The narrow-gauge line is so poorly equipped for handling ore that the mine has found it impossible, up to the present, to ship ore to the coast. Consequently the entire output is hauled northward from Prijedor over the standard-gauge line touching that point. Most of the ore goes to the Witkowitz furnaces in Czechoslovakia; smaller amounts go to Hungary and Poland.

It is interesting to note the relative costs of extraction and transportation. The price during 1925 was 101.20 dinars per metric ton for ore, f. o. b. Prijedor, and the cost of transportation from Prijedor to Czechoslovakia was approximately three times that amount. The cost of ore delivered in Witkowitz approaches, therefore, 400 dinars per metric ton (approximately $7.14). It has been suggested that a blast furnace be erected at Prijedor, but, in that case, the cost of importing coke from Czechoslovakia would be greater than the present cost of exporting ore to that point.

These conditions have resulted in a decrease in production from 263,165 metric tons in 1924 to 99,711 metric tons in 1925.

Vareš mines.—The iron industry at Vareš dates back to the days of the Turkish occupation, but the present mining plant was built by the Austrians after the Austro-Hungarian annexation of Bosnia in 1878.

The ore body occurs in a number of irregular lenses which extend over a length of 5 kilometers and have an area of about 7 kilometers. The total reserves are estimated at 15,000,000 metric tons.

The ore consists of siderite, limonite, and hematite. In 1918 there were produced: Siderite, 18,695 metric tons; limonite, 13,800 metric tons; hematite, 13,810 metric tons; total, 46,305 metric tons.

In 1924 the output was 66,472 metric tons and in 1925 it was 33,123 metric tons, the decrease being due to cost of extraction and low price of ore, which was 150 dinars per metric ton for hematite (60 per cent) and 90 dinars for limonite (47 per cent).

A variety of hematite that is rich in manganese and brownish black in color occurs in pockets in the red hematite. The manganese content of this black hematite ranges between 5 and 12 per cent.

Numerous "workings" have been undertaken on the ore body, and mining is carried on both by open work and by tunneling. About 250 men are employed at the mine. The central plant is located at the "workings" known as the Krapuli. The Smreka and Droskovac "workings" lie about 2 kilometers from the central plant.

The central plant is equipped with an electric power station and an air-compressor station. Drilling is done by means of pneumatic

drills, both the Ingersoll and the Flothman types being employed. Dynamite is the explosive in use at the present time.

The difference in level between the highest tunnels and the central plant is about 200 meters. From these workings the ore is hauled to the main collecting station in wooden cars, each carrying 1½ tons over a 35-centimeter-gauge line. A train of about 20 cars is drawn by an electric locomotive.

The Vareš mines lie about 40 kilometers north of Sarajevo. The district is connected with the Sarajevo-Brod railway by a branch line which reaches the main line at Podlugovci. This branch line is 26 kilometers long; it has a circuitous course and many high gradients, rising 300 meters in passing from Podlugovci to Vareš.

Most of the hematite produced at the mine is exported, principally to Czechoslovakia and Hungary. Prior to the war the Austrians shipped the ore by rail to Metković (an Adriatic port), and from there by ship to the blast furnaces of Servola (near Trieste) or by rail to Brod and from there to Resicze-Banya (then in Hungary, but now belonging to Rumania).

The limonite and siderite ores are treated in the company's blast furnaces at Vareš.

Topusko mine.—There is a small iron mine at Topusko, in Croatia-Slavonia, which produced 4,910 metric tons of ore in 1924, but which was shut down during 1925.

PRODUCTION OF CRUDE IRON

Vareš blast furnaces and foundry.—The smelting of the Vareš ores was begun by the Turks in 1846. The only fuel used at that time was charcoal. Pack horses were then the sole means of transport for the ore, limestone, and charcoal to the furnace and for the iron bars and finished products to the surrounding centers.

When the Austrians reopened the industry in 1890, the primitive Turkish smelters were abandoned and a small blast furnace was erected. A second and larger blast furnace was built in 1899. Until 1904 Bosnian charcoal was the only fuel used in these furnaces. At the present time charcoal is still used in considerable quantity, but coke, obtained principally from Czechoslovakia, is gradually replacing the charcoal. Limestone, as fluxing material, is obtained from a quarry 4 kilometers distant. It is hauled by ox teams and costs, when delivered at the plant, more per ton than does the iron ore.

Siderite (iron carbonate) forms the bulk of the ore treated in the Vareš furnaces. The plant is therefore equipped with a battery of 17 roast ovens for converting the siderite to iron oxide before it goes to the blast furnaces.

The blast furnaces produce white pig iron (which is sold to the steel mills for the production of Martin steel), and grey pig iron, which is used in the company's foundry. The plant produced a total of 9,180 metric tons of iron in 1918, and 12,983 metric tons in 1924, but has never been able to attain its pre-war production, which in 1913 amounted to 53,586 metric tons.

The company's foundry is equipped with 2 cupel ovens. The cast iron used in the foundry is produced by smelting a mixture of grey pig iron and scrap iron. Stoves are the principal product. The foundry is well equipped for the manufacture of water pipes but has

not produced any considerable quantity in recent years because of the small demand for them.

From 820 to 850 men are employed in the mines, the blast furnaces and foundry. The greater portion of these are unmarried men and are housed in the company's "garrisons."

The Vareš Iron Industry (mines, furnaces, and foundry) is a stock company.

Topusko blast furnace.—There is also a small blast furnace in Topusko, Croatia-Slavonia. This furnace produced only 1,012 metric tons of pig iron in 1922 and 1,886 metric tons in 1924. This iron supplies the local needs of several small foundries.

STEEL MILLS

There are four steel mills in the Kingdom—one in Bosnia and three in Slovenia. These mills produced 12,900 metric tons of steel in 1924. All the mills are equipped with Martin furnaces. Except in the case of the Bosnian mill, the raw materials (scrap iron, pig iron, and iron ores) are derived only partly from national sources, the greater portion being imported from Austria.

Bosnian steel mill at Zenica.—The Zenica steel mill is in direct connection with the Brod-Sarajevo railway and is near the Vareš iron mines and blast furnaces. The Zenica mills and the Vareš blast furnaces are, to a great extent, mutually dependent on each other. The mill is equipped with three Martin furnaces, each operated by a 1,000-horsepower steam engine. The products include sheet metal of several degrees of thickness, rolled wire, steel rails for use in mines, and various other commercial forms of steel.

The Zenica mill was established in 1892. In 1908 it became part of the Austro-Hungarian Iron Trust. Its maximum production was of 35,870 metric tons in 1912. In that year the steel and steel products were sold locally in Bosnia-Herzegovina or exported to neighboring States as shown in the following statement: Bosnia-Herzegovina, 7,879 metric tons, or 23.9 per cent; Austria, 2,065 tons, or 6.25 per cent; Hungary, 20,223 tons, or 61.3 per cent; Bulgaria and Rumania, 2,811 tons, or 8.55 per cent.

After 1912 the production declined steadily as shown in the following statistics:

	Metric tons		Metric tons
1913	27,490	1918	11,792
1914	23,490	1919	4,708
1915	14,015	1920	5,451
1916	17,214	1921	3,345
1917	16,367	1924	1,414

The number of workers in 1924 totaled 680.

At the present time the sale of Zenica steel is limited almost entirely to small Bosnian plants.

Slovenian steel mills.—In Slovenia, three companies have steel mills at Jesenica, Ravne, and Štore, respectively. The mills formerly produced a considerable quantity of Martin steel. These three plants are favorably located as regards railway transportation, being on standard-gauge lines in direct connection with the main international line. But, even so, the costs of operation are high. Neither coking coal nor workable bodies of iron ore are found in Slovenia, and the pig

iron must also be imported. When Slovenia formed part of the Austro-Hungarian Empire, the steel mills could obtain their raw materials from within the Empire, and they had a good outlet for their products. But, now, organizations which formerly operated as a unit find part of their property in the Kingdom of the Serbs, Croats, and Slovenes, part in Austria, and part in Italy. State limitations on imports and exports have disrupted some of these organizations and forced others to seek new sources of supply and a new outlet for their products. Meanwhile, production has greatly decreased.

The Jesenica Mills (Krainish Iron Industry), with subsidiary plants at Javornik, Dobrava, and Feistritz, formerly owned the blast furnaces in Servola (near Trieste) from which it obtained its crude iron. After the armistice, when the company was reorganized, the Servola blast furnaces no longer formed part of the company's property, and up to the present time trade restrictions have prevented the continuance of their relations and the Servola blast furnaces have been closed down. The two steel mills in Slovenia at Jesenica and Javornik and the electrode factory at Dobrava, as well as the steel mills at Feistritz (which is just across the border in Austrian territory) are all within a few miles of each other. These all belong to the company and are operated as a unit.

These mills now obtain their crude iron from blast furnaces in southern Austria. The present industrial policy favors the obtaining of crude iron from domestic plants, but transportation difficulties have restricted the supply from Vareš. At present the company is using pig iron and scrap iron as raw material in the production of Martin steel. Coke is imported from Czechoslovakia and England. Martin steel is produced at Jesenica (the plant operates five Martin furnaces), and the other plants belonging to the company are equipped with rolling mills. The products of the company include ingots, plate steel, bars, both hot-rolled and cold-rolled band iron, sheet metal, all kinds of cables, furniture springs, and shoe nails. The foundry at Feistritz also produces church bells.

During the fiscal year ended June 30, 1925, this mill, with 1,999 workmen and 147 other employees, had the following output:

	Metric tons		Metric tons
Crude steel	25, 741	Rolled railway iron	2, 254
Semifinished articles	20, 949	Wires, wrought	6, 444
Plates	1, 423	Small wires	2, 616
Rolled iron	14, 668	Gray casts	633
Rolled wires	4, 586	Electrodes for electric furnaces	6, 955

An important steel mill is located at Ravne. It is one of the oldest steel mills in Europe, and has always specialized in the production of high-grade steel which is exported to all parts of the world. The plant operates two Martin furnaces, one of 9 metric tons capacity and the other of 7 metric tons capacity. The plant also has three rolling mills in operation, the largest of which produces 35 to 40 metric tons daily, another 15 to 20 metric tons, and the third 5 to 10 metric tons daily. In the machine shop forming part of the plant, the ordinary steel is worked up into wagon tires, axles, etc., and special grades of alloyed steel are worked up into airplane parts, tools of various sorts, etc. The plant is equipped for producing shells and rifles, but the Government contemplates purchasing this equipment and removing it to the interior of the State.

Raw materials in use in this plant, with the exception of a certain amount of scrap iron, are all imported. Pig iron is obtainable from Austria and coke from Czechoslovakia.

The production in 1925, with 350 workers, totaled 2,660 metric tons.

The steel mill at Štore (near Celje) was formerly the property of Norwegian and German capitalists but is now the property of the State and is leased to a private company. The company owns a coal mine in the neighborhood but coke must be imported. The plant operates a Martin furnace and rolling mill, has a well-equipped foundry, and is staffed with well-trained employees. Complicated castings are made of both cast steel and cast iron.

In 1925, the output, with 343 workers, amounted to 8,740 metric tons.

GENERAL FACTORS IN PRODUCTION OF IRON AND STEEL

Notwithstanding the presence of numerous deposits of iron ore, it is noted that the actual production of crude iron is limited to two centers, Vareš and Topusko. In the production of iron, fuel may be considered as important a raw material as iron ore; and all the coke used in the blast furnaces must be imported. Charcoal may be used instead of coke, and as the beech forests of Bosnia are very extensive, charcoal (a universally high-priced fuel) is produced at comparatively low cost. The cost, however, is such that it is barely able to compete with imported coke.

A saving in coke or charcoal could be effected by the introduction of electro-metallurgical processes for the reduction of iron ore. As hydroelectric plants could furnish electric current at a very low cost, this process has been given considerable study, but up to the present no attempt has been made to apply it.

The most unfavorable factor in the local production of iron is the inadequate and very expensive transportation. The iron-ore deposits are situated in a high plateau region at a considerable distance from the sea or from any means of water transportation. The high cost of shipping the iron ore to foreign blast furnaces or of importing coke to the local plants and of shipping the resultant products to industrial centers would seem to indicate that this industry can not have more than local importance.

The production of steel in the Slovenian steel mills may remain an important industry, provided economic treaties can be negotiated with neighboring States enabling the mills to import raw materials under favorable conditions.

LEAD AND ZINC

Lead and zinc deposits are found in Slovenia, Bosnia-Herzegovina, northern Serbia, and South Serbia (Macedonia). Formerly lead mines were exploited in all of these districts, but at the present time only the Slovenian deposits are being worked. The old mines of Bosnia-Herzegovina and Serbia may later be reopened and profitably worked, as they were closed down partly on account of unsettled conditions and partly because of difficulties of exploitation, such as pumping the mines—not because of the exhaustion of the ore bodies. It is not probable, however, that any of the lead mines in Bosnia-

Herzegovina and Serbia will be reopened in the near future, or at least until the railway system is extended, as they are all too far from the existing railroads to be operated profitably.

NORTHERN SERBIA

The principal lead and zinc deposits of northern Serbia are to be found in the Krupanj, Kosmaj, Kućani, Rudnik, Mt. Avala, and Ruplja mining regions. The Krupanj district is located southwest of Belgrade between Valjevo and Loznica. A new railway, which will traverse the mining region, is now being constructed between these two towns and may result in renewed activity in the lead mines. In this district there are a number of ancient workings dating from the Middle Ages, but the most flourishing period in modern times was from 1874 to 1900, when the total output of the region amounted to 1,500 metric tons of metallic lead. During the World War, there was a temporary recrudescence of lead mining, but there has been no extraction since 1918 except at the Podrinje mine. The leading mines of this district are:

Podrinje mine.—The principal ore is galena, but cerussite (lead carbonate) is also abundant. The ore lies in veins in massive Triassic limestone, notably in the neighborhood of intrusive serpentine. This mine had a small lead-smelting plant. In 1922, the extraction of lead ore totaled 1,439 metric tons and the average number of miners was 26. Since then it has been closed down.

Zelenac mine.—Here galena is the principal ore, but, in addition, chalcopyrite, zinc blende, and iron pyrites are met with in the veins.

Revnaja mine and Tolisavac mine.—These mines were opened just prior to the Balkan war, but have since remained closed. A small lead-ore washing plant was created near the Tolisavac mine.

Zavlaka mine.—The principal ores in these deposits are zinc blende, calamine, and smithsonite. Lead ores including galena and cerussite are also found. The ores occur in irregular pockets and veins in the Triassic limestone in proximity to intrusive trachytes. When the mine was in operation the zinc ores produced here were sent to the zinc smelter at Celje, Slovenia.

The Kosmaj district, which is about 30 kilometers south of Belgrade, has very extensive dumps of old slag dating from Roman times. The slag contains from 6 to 7 per cent lead and was worked over by the Austrian military authorities during the war with results which are believed to have been highly successful. The mines are located near the villages of Parcani, Guberevac, Stojnik, and Babe.

The Kućani lead and zinc mines are located in northeastern Serbia near Pojarevac. In 1849 the Serbian Government endeavored to reopen these ancient mines, but as the enterprise did not prove successful they were leased to a private company. Air compressors, boring machines, and water pumps were installed, and in the period from 1876 to 1893 the mines yielded 140,000 metric tons of zinc ores and 270,000 metric tons of lead ores, carrying 1,293 kilos of silver and 62,363 grams of gold. But in 1893 the surface plant was destroyed by fire and the mines were closed. Since then only exploratory work has been undertaken.

The Rudnik zinc and lead mines are in the Rudnik Mountains about 12 kilometers north of Milanovac. The average yield from the zinc ores, principally blende and calamine, is 10 to 30 per cent of metallic zinc. The lead ore carries a considerable amount of silver and gold. Numerous slag heaps and old workings show the existence of a former extensive mining center.

At Mount Avala, 20 kilometers south of Belgrade, is a district that has long been known for its deposits of mercury ores, but there are also many galena-bearing bodies which have been profitably exploited in the past.

The Ruplja lead and zinc mines are located about midway between Niš (Nish) and Vranje. They have been exploited within recent years, but are not at present being worked. Galena is the more frequent ore, but zinc blende predominates in some of the lodes.

SOUTH SERBIA (MACEDONIA)

In South Serbia (Macedonia) the lead mines of Kratovo, Zlatovo, Mount Kilka, and Gurišet were formerly of considerable importance but are now no longer being worked. The Kratovo lead mines are located about 45 kilometers northeast of Kumanovo, the nearest railway station, but ores in different districts are found in trachyte, which protrudes through crystallized schist and the upper chalk. The veins appear to run through in all directions and have very steep slopes. Recent investigations indicate that the ores of this district, principally the sulphides of lead, zinc and copper, are far from being exhausted. These mines were worked by the Austrians during the Turkish occupation but have since been idle.

The Zlatovo lead deposits lie 12 kilometers southeast of Kratovo. There are a number of old workings of indefinite extent, and primitive lead-smelting works which are now largely dismantled.

The Mount Kilka lead and silver mine, which has not been exploited in recent times, is 20 kilometers south of Kriva Palanka. Several other mines are in the neighborhood, but all of them have been abandoned on account of unsettled conditions.

The Gurišet lead deposits in the Vardar Valley, in Macedonia, were formerly worked on a small scale but have not been producing for many years.

At Tetovo, near the Albanian frontier, is an old silver-lead mine which has not been recently exploited.

At Novo Brdo, near Novi Pazar, are fairly important lead deposits which are not being worked, as the domestic company holding the concession has not been able to raise sufficient capital to start operations.

BOSNIA-HERZEGOVINA

In Bosnia there are five lead deposits, as follows:

At Srebrenica, about 30 kilometers east of Sarajevo, there are deposits which were mined by the Romans, reopened in the Middle Ages by the Saxons who established a colony here, and worked during the World War by the Austrian authorities. In 1918 production practically ceased, only 10 miners being retained to keep the workings open.

At Olovo, 30 kilometers northwest of Sarajevo, in the Krivaja Valley, lead was mined somewhat extensively in former times.

At Borovice, lead ores are associated with zinc blende, copper, and iron pyrites, but they have never been exploited.

At Zahot, 6 kilometers north of Fojnica, zinc blende occurs with small quantities of cinnabar.

At Adamusa, near Prijedor, silver-bearing lead ores have been mined in the past.

SLOVENIA

Slovenia is the only Province where lead is being mined at the present time. Deposits of ore exist in a number of localities, but the only ones being actually exploited are the famous Mežica mine in north Slovenia, near the Austrian frontier, and the Litija mine, north of Ljubljana.

The former mine is 18 kilometers southeast of Pliberg and 8 kilometers southwest of the Prevalje station on the Klagenfurt-Maribor railway. Galena (lead sulphide) is the principal ore, but lead also occurs in the form of wulfenite (lead molybdate). In addition to

FIG. 10.—Mountain scene in Slovenia

the lead ores, zinc blendes, smithsonite, pyrites, and marcasite occur in smaller quantities. The gangue materials are principally fragmental limestones and a brown clayey matter, but quartz, calospar, fluorspar, and barytes are also found in them.

The ores occur mainly in veins, in zones of local brecciation, and in crevices or gash veins, in limestones with a hanging wall of slate.

The Mežica mine has been exploited since the fifteenth century. Operations were given a new impetus in 1880. By 1900 the output had been brought up to 3,300 metric tons of metallic lead, and in the years immediately preceding the war the production had reached about 6,000 tons annually. But the highest point in the production occurred in 1916, when the mines yielded 12,884 tons of lead (from

galena), 301 tons of zinc ores, and 22 tons of wulfenite (lead molybdate). At that time, 1,176 men were employed in the mines and smelting works. The yield of wulfenite, which is regarded as an ore of molybdenum rather than of lead, reached its highest point in 1910, when 122 tons of it were obtained. This is the only place in the Kingdom where molybdenum occurs in any quantity. During the year 1922, the mines produced 59,934 metric tons of ore; in 1923, 57,194 metric tons; in 1924, 63,993 metric tons; and in 1925, 78,549 metric tons. The average number of miners in 1922 was 1,044 and in 1923, 1,051.

The mine has 4 shafts and 10 main levels. The first of these levels is at a depth of 884 meters. The levels are of varying lengths, the highest level having a length of 5,130 meters and the lowest level a length of 795 meters.

The mines were originally owned by an Austrian concern, but in 1918 the Slovenian provincial government sequestered them. This sequester, however, was lifted when the mines were purchased by an English company.

At Litija, a small town in the Save River Valley, on the Ljubljana-Zagreb main railway, is a lead mine which has been worked since 1870. It is owned by a private domestic company. The production in 1870 was 47 metric tons; in 1880, 587 metric tons; and in 1890, 202 metric tons. The output continued to decrease until operations ceased entirely. During the World War, production was again started and continued until 1921. The ore output in 1919 was 1,057 metric tons and in 1920 580 metric tons. This mine again started in producing in 1924, but the output during that year was only 62 metric tons.

MINE PRODUCTION

The production of lead ore, containing also zinc and molybdenum, amounted to 61,473 metric tons in 1922, to 57,194 metric tons in 1923, to 64,117 metric tons in 1924, and to 78,549 metric tons in 1925.

With the exception of 1,439 metric tons extracted by the Podrinje mine in 1922 and of 62 metric tons produced by the Litija mine in 1924, the total yield of lead has come from the Mežica mine.

SMELTERS

There are two lead smelters and one zinc and lead smelter in the Kingdom—all in Slovenia. They are the Mežica smelter at Zerjav, the Litija smelter at Litija, and the Celje smelter at Spodnja Hudinja, near Celje. The last-mentioned smelter is primarily a zinc smelter, and the production of lead is practically negligible.

The installation of the Mežica smelter consists of two large smelters and six small American smelters, four converters, two refining vats, two Phoenix and two Jaeger blowers, and two exhausters. The motive power is furnished by 10 electric generators having a total capacity of 1,000 kilowatts at 3,300 volts, the driving force being supplied by steam engines having a capacity of 1,090 horsepower and by one 300-horsepower Diesel motor. This plant obtains ore from the Mežica mines.

The smelter produced 9,882 metric tons of pig lead in 1924 and 9,440 metric tons in 1925. In 1925, 252 metric tons of lead pipes and 361 metric tons of lead shot were also manufactured.

The lead smelter at Litija was erected for the purpose of smelting its own ores, as well as those obtained from the Klagenfurt, Raible, and Bleiburg mines, all of which are now across the Serbo-Croat-Slovene frontier. At times, this plant even imported ores from Tunis and Algeria.

The smelting plant consists of two main roasting furnaces and kilns. Two types of lead are produced—(1) a soft variety consisting of fairly pure lead and (2) a harder variety containing a small proportion of antimony. The latter variety was produced in considerable quantities during the war, when the works were under the control of the Austrian Government. The total annual capacity of the smelter is 5,000 metric tons of lead, but the output is small because of difficulty in obtaining ores. In 1922, the production of pig lead totaled 396 metric tons; in 1923, 218 metric tons; and in 1924, 1,674 metric tons.

This smelter is owned and operated by a domestic company.

The Celje smelter is owned by the State and is known as the "State Zinc Works—Celje." It is operated on a 50-year concession by a domestic company.

At the time the plant was constructed, its chief source of ores was Raible. The cession of Celje to the Serbo-Croat-Slovene State and of Raible to Italy under the terms of the Treaty of St. Germain has rendered difficult, if not impossible, the obtaining of ores from the former source. However, the commercial treaty signed with Italy in 1924 provides that the transit of ore from the Raible mines to the Celje smelter is to be unrestricted. Up to the present time the smelter has been running chiefly on a reserve stock of ores which had been accumulated before the frontier lines were drawn.

In addition to the problem of ore supply, the company experiences difficulty in obtaining coke. Austria supplies the greater part of the coke, but it is also imported from Italy, Czechoslovakia, and Upper Silesia (Poland). Its supply of non-coking coal is obtained from sources near at hand—lignite from Velenje and brown coal from Trbovlje.

The zinc works are equipped with an ore-crushing plant, a roasting plant with which is combined a sulphuric-acid plant, a zinc-distillation plant and refining works, and a rolling mill. There has also been added a copper-sulphate plant in which the sulphuric acid produced by the company and copper obtained from the Bor mine in Serbia are used as raw materials for the production of the copper sulphate. A plant for making galvanized iron (zinc-covered iron) is now in course of construction.

In addition to the foregoing, the works have a number of accessory departments, including an electric central capable of generating 600 horsepower, a ceramic department where all the muffle furnaces used in the smelter are made, various shops (carpenter shop, blacksmith shop, machine shop, etc.), and storerooms for raw material, plant equipment, and finished products.

Of the foregoing plants, the roasting plant is the only one that was not giving satisfaction. It has since been closed down and the roasting is now being done at the Prazilnica Celje, a concern that is under the same management as the Litija lead smelter.

The crushed, dried, and roasted ore goes to the distillation which is carried on by two different systems. One of these consists of

5½ tons of ore and 2½ tons of reducing coke. Each oven produces daily from 1½ to 2 tons of raw zinc and about 0.15 ton of zinc dust. In the other systems, there are 10 distillation ovens of the Silesian system in which there are 340 muffles, fitted with long receptacles to receive the condensing metal. These muffles are heated by a Siemens regenerative furnace in which the gas is produced from lignite.

In the refinery, the crude zinc is remelted and the lead occurring with it is drawn off. The zinc is then treated in the rolling mills, which convert it into large sheets, in which form it is sold to the trade. The rolling mills consist of two mills, one of which serves to reduce the zinc bars to thick plates and the other to reduce these further to thin plates.

A galvanizing plant is in course of construction. This plant is being built on entirely modern principles and it is expected that a considerable portion of the zinc produced at the smelter will be used in producing zinc-coated iron.

The copper sulphate plant was installed with a similar idea of using its own product, sulphuric acid. But at the present time, in order to maintain this plant in operation, both sulphuric acid and copper must be purchased.

This plant had a total output of zinc metal in 1922 of 2,257 metric tons; in 1923, of 1,947 metric tons; in 1924, of 2,946 metric tons; and in 1925, of 2,232 metric tons. The lead output totaled only 12 metric tons in 1922, 11 metric tons in 1923, and 10 metric tons in 1924.

COPPER

Copper mining within the present boundaries of this Kingdom dates back to the earliest historical period. Probably the oldest of these mines are located in the southern part of Bosnia. In the mines of Maskara, near the village of Volyevac in the Vrbas Valley, old mining implements such as stone hammers were found in the ancient workings. These mines have not been worked in recent times, but about 20 years ago they were exploited for the ores of copper and mercury. The copper occurred in "fahl-ore" (mixture of sulphides of copper, antimony, zinc and iron). The main lode was worked to a depth of about 300 feet by six principal levels with cross-cuts.

The copper mine of Sinjako, at Varcar Vakuf, 15 kilometers northwest of Jajce, is thought to have been worked in Roman times, as indicated by the presence of an old castle and the remains of an ancient colony near the mines. The mines were operated during the war by the Austrians, but the production was small. In 1915 it was 93 metric tons of ore; in 1916, 550 metric tons; and in 1917, 140 metric tons.

Other copper mines in Bosnia include the Fojnica, the Mračaj, and the Bukovina mines. Although ore is still found in all these mines, it can not be commercially produced under present competitive conditions.

Copper ore occurs in Croatia-Slavonia in the Brestinac mine, 80 kilometers south of Zagreb; in the Samobor mine, 20 kilometers west of Zagreb; and at Nebojan, near Petrinja. But none of these mines is being operated at the present time.

The total annual output of metallic copper preceding the Balkan and European wars amounted to about 7,000 metric tons. This production came almost entirely from the Bor mine in northern Serbia.

The mine at Majdan Pek, first exploited for iron pyrites, also contains chalcopyrite and cupriferous limonite. At one time it produced considerable copper. But the mines are situated in extremely difficult mountain country. To meet these difficulties an aerial haulage ropeway 17.5 kilometers long was constructed from the mine to the port of Milanovac on the Danube. During the war and the occupation of Serbia by the enemy, the Austrians, employing prisoners of war, are said to have produced 30 metric tons of copper ore per day.

Chalcopyrite is here the principal ore of copper, but iron pyrites, which is mined for the manufacture of sulphuric acid, is the more abundant mineral and is the only one now produced at the mine. The extraction of pyrites at this mine totaled 26,306 metric tons in 1924 and 38,988 metric tons in 1925.

The only mines actually producing copper in the Kingdom are located in Bor. These are situated on an extensive plateau of volcanic rocks. The ore occurs either in veins or in large lenses in intimate relationship with biotite, augite, and hornblende andesites which have been extensively altered by subsequent intrusive phenomena. The ore consists largely of a compact mixture of copper pyrites, copper glance, and bornite in which small but recoverable amounts of gold and silver occur.

There are five principal veins, but the greatest workings are at Čuka Dulkan, where the ore occurs as a huge lens. This ore body has been proved by a main shaft to a depth of 300 feet, and, by means of levels, its length is proved as far as 750 feet. Its average thickness is about 80 feet. The ore averages 6 per cent copper.

The ore extracted during 1924–25 totaled 147,691 metric tons as compared with 136,218 metric tons in 1923–24.[18]

During the fiscal year 1921–22, the mine produced 85,122 metric tons of ore—an increase of 21,041 tons over the production of the previous year. The copper obtained from this ore amounted to 5,222 metric tons, nearly double the amount of copper produced during the preceding year. During the fiscal year 1923–24, the production of copper metal was 7,781 metric tons, which was greater than the maximum pre-war output, 7,600 metric tons in 1911–12. During the year 1924–25, the production declined to 7,132 metric tons.

The mine is worked by tunnels and cross-cuts, Ingersoll-Rand compressors and pneumatic drills being used for that purpose. But the company is now seeking to open up the large beds of ore and to convert the mine into an open-cut mine. During the year 1921–22 a steam excavator was put into operation and 40,490 cubic meters of surface soil and overlying rock were taken out in order to uncover the ore deposit.

Considerable diamond drilling and other exploration work have been undertaken recently, and during 1924–25 a new working yielded 21,838 metric tons of ore, which are included in the previously cited figures for the output for that year.

[18] The figures here cited are for fiscal years ended June 30.

In view of its size and relative richness in copper, the Bor mine ranks as one of the greatest copper producers in Europe.

The mines are being exploited on a concession basis and include the villages of Bor, Krivelj, and Oštrelj, as well as the right to utilize for mining purposes the timber in the adjoining Crni-Vrh forest.

Besides the copper mine, the syndicate owns coal deposits, forests, a local railway, and a smelter plant. Notwithstanding its own coal deposits, which are in the vicinity of the copper mine, the management has found considerable difficulty in securing a sufficient supply of suitable coal and coke for its mine and smelter. And as the production of coal has scarcely exceeded the amount demanded by the railroads and industrial plants, the mine is now compelled to import coal from western Europe.

The limestone used as flux in the smelting of the copper is obtained from the Metovnica and Krivelj quarries which are leased by the syndicate. During 1924–25, 68,807 metric tons of limestone were delivered to the smelter from these sources.

The roasting and smelting of the ore is done at the smelter in Čuka-Dulkan. The smelter has four blast furnaces with a capacity of 220, 200, 130, and 100 metric tons, respectively. At this smelter is produced crude copper or copper matte. As no copper refinery exists in the country, all the copper matte is exported, principally to the United States, Germany, France, or Italy, for refining and the recovery of its gold and silver content. There is little or no advantage in refining copper in the Kingdom, as there is very little domestic use, and hence very little sale, for copper.

The exports during recent years were as follows: 1923, 5,748 metric tons; 1924, 7,605 tons; 1925, 7,880 tons.

The total number of men employed at the mine and its subsidiary plants during the fiscal year 1924–25 was 1,771.

The transportation facilities of the mine are quite satisfactory. The company owns a 22-kilometer narrow-gauge railroad line which connects at Metovnica with the narrow-gauge railroad line between Zaječar and Paračin. The traffic on this line totaled 167,789 metric tons in 1924–25. From Zaječar there is a broad-gauge line to Prahovo, a lower Danubian port below the "Iron Gates," and from Paračin there is a broad-gauge line to the central Danubian port at Belgrade. The two broad-gauge lines passing southward through Zaječar and Paračin respectively converge at Niš (Nish) and connect Niš with the Mediterranean port of Saloniki.

GOLD AND SILVER

The auriferous and argentiferous sulphides of lead, copper, and iron are the chief source of gold and silver. Alluvial gold was at one time extensively exploited, especially in Serbia, Bosnia, and Croatia-Slavonia.

In Croatia-Slavonia, auriferous gravels occur in the neighborhood of Požega (30 kilometers northwest of Brod). There is here a group of low hills consisting of crystalline schists partly overlain by Tertiary deposits. The gravels borne down by the small streams flowing from these hills carry small quantities of gold, usually associated with magnetite. In the Lavant Valley, north of Grandrad in Slovenia, are extensive old placer washings for gold, but the more important ones are just beyond the Kingdom's frontier, in Austria.

In Bosnia there was at one time a considerable amount of alluvial gold mining. In the Vrbas Valley these old workings are extensive. These gravels appear to have been systematically followed in an uphill direction, and around Gornji Vakuf the ground has been very thoroughly worked over.

The gold-bearing alluvial deposits in the Pavlovac stream near the town of Fojnica are thought to have a present-day importance, but very little work is now being done on them, although nuggets of considerable size are occasionally found here.

Most of the gold mining in Serbia is in the Stara Planina Range, which is regarded as a continuation of the Transylvanian Alps and Carpathians. This range consists mainly of metamorphic and crystalline rocks, flanked by Paleozoic slates and quartzites. These are overlain in some places by limestone, in other places by sediments, and are intruded by basic volcanic rocks and by a subsequent andesitic series of volcanic rocks. The intrusion of this andesitic series is in close relationship to all of the observed mineralization in this district.

The alluvial gold in this district is always quite highly argentiferous; it occurs variously as fine dust, thin flakes, slender needles, granules, and nuggets. In the placer-deposits a native amalgam of gold is frequent. It occurs in rounded whitish grains in association with red granules of cinnabar.

The principal mines are near Majdan Pek in the valleys of the Pek, Porecka, Timok, and Bela Reka Rivers. One of the largest mines is the Saint Anne, which is on the slopes of the Rusman hill, close to the village of Glogovica, on the southwestern slopes of the Deli-Jovan Mountains. The ancient workings are clearly shown to belong to two distinct periods, the Roman and the Middle Ages. In the main vein, which has been recently worked, the gold occurs in association with iron pyrites in a quartz vein. But there are numerous other smaller veins, to form a true stockwork in the serpentine and gabbros which is strongly impregnated with auriferous pyrites. The veins have been worked to a depth of 110 meters.

Other deposits in the immediate vicinity and similar in many respects to the St. Anne mine are found at Gindase and Glogovica Reka.

In the thickly wooded upper Pek Valley, about 5 kilometers from Majdan Pek, are the Blagojev Kamen mines. Of special importance in this group of mines are the St. Barbe and the Bakarni Potok. Both these mines are in the neighborhood of extensive ancient workings. In the St. Barbe, the gold occurs in association with pyrites, chalcopyrite, and galena, in quartz veins. The principal level in this mine extends over a length of 180 meters. The thickness of the main veins ranges from 3 to 6 meters. In the highest levels the ore assays made prior to the war are said to have averaged 40 to 46 grams of gold per metric ton, but the value of the ore decreased with depth, the lower levels yielding only about 18 grams of gold per metric ton.

Considerable interest has been taken in modern times in the auriferous gravels of eastern Serbia. From its confluence with the Danube, the Pek River gravels are gold-bearing. But the most promising area is the broad stretch of gravels in the upper portion of this valley, between Markova Kroma and the defile of Kučevo. The highest yields have been obtained in the neighborhood of the village

of Duboka, and also between Neresnica bridge and the mouth of the Topanska River. These gravels were worked by four electrically driven dredges. In the neighborhood of Neresnica there is considered to be sufficient favorable ground for the employment of the four dredges for 20 years.

Methodical researches on these auriferous gravels in the Pek Valley were carried out by the Serbian Mining Department. Favorable results were obtained in the lower part of the valley (13 kilometers from the confluence of the River Pek with the Danube) and still more favorable results higher up the valley between Blagojev Kamen and Debeli Lug. But the transport of material to this district is very difficult at present.

After the Pek Valley, the most important auriferous alluvial deposits are met in the valley of the Bela Reka. This river rises on the southeastern slopes of the Crna Gora Mountains near the village of Like and flows into the Timok River in the neighborhood of Zaječar. The tributaries of this river, the Pavlov and Vetren Rivers, are also rich in auriferous gravels. In this district, silver is the only metal accompanying the gold.

Methodical tests have also been conducted throughout the valley of the Timok. This river rises to the east and flows northward, entering the Danube near Zaječar. In the lower portion of the valley, between Kraljevo Selo and Grijane, the gravels have been exploited by a French concession with fairly favorable results.

Still another river in this region, the Porecka, which is also a tributary of the Danube, has been shown to have auriferous gravels in its basin, but the yield was not considered sufficiently favorable by the Serbian Mining Department to warrant extensive dredging.

The entire output of gold and silver is from the Bor mine and is recovered in the process of refining copper matte. The production during 1923, 1924, and 1925 was as follows:

	1923	1924	1925
	Kilos	*Kilos*	*Kilos*
Gold	248	228	233
Silver	1,008	927	949

MANGANESE

The only deposit of manganese now exploited is at Čevljanović, a mountainous district in Bosnia, 25 kilometers north of Sarajevo.

The Čevljanović mines were opened in 1880 and attained importance in 1900. Since then the annual production has been as follows:

Years	Metric tons	Years	Metric tons	Years	Metric tons
1900	7,939	1906	7,651	1912	4,650
1901	6,346	1907	7,000	1913	4,700
1902	5,760	1908	6,000	1914	4,120
1903	4,538	1909	5,000	1915	[1]
1904	1,114	1910	4,000	1916	22,674
1905	4,129	1911	3,600	1917	48,851

[1] Not stated.

Since the war the production has become negligible, the total output in 1922 being only 165 metric tons; in 1923, 5,145 tons; in 1924, 4,570 metric tons; and in 1925, 2,716 metric tons.

The ores in this mine consist mainly of psilomelane (hydrous oxide of manganese), together with a smaller amount of pyrolusite (manganese dioxide). The ore is of sedimentary origin and occurs in pockets or lenticles in argillaceous beds. The ore bodies are not compact, and the psilomelane is intimately associated with foreign matter, such as barytes, from which it is separated by mechanical means.

The deposits extend over an area about 12 kilometers long and 6 kilometers broad. The principal workings in the district are those at Grk Drazević and Gojanović.

At Grk the ore is obtained in open workings, which extend to a depth of 60 meters. At the other mines it is exploited in part by open work and in part by tunnels.

A light, narrow-gauge, industrial railway connects the mines with the main-line Sarajevo-Brod Railway. This branch railway, which is 26 kilometers long, joins the main line at Semizovac, at which point an ore-dressing plant has been erected. This plant, which concentrates the ore (separates it from foreign contents), includes crushers, trommels, sizing machines, and a washing plant. The mill is operated by one 50-horsepower turbine and one 80-horsepower locomobile. It is capable of an annual output of 12,000 metric tons of graded ore.

The washed and sorted ore contains from 46 to 55 per cent manganese, 11 to 12.38 per cent silica, 3 to 5 per cent iron, 0.9 to 3 per cent alumina, about 0.07 per cent phosphorus, and 0 to 0.94 per cent sulphur.

Some of the ore is shipped to the electro-metallurgical plant at Jajce, Bosnia. Here it is made into ferro-manganese, containing as high as 86 per cent manganese, or into spiegeleisen, containing 26 to 29 per cent manganese.

There are several less important occurrences of manganese ore in the immediate neighborhood of Cevljanović. These include those of Gradinski Potok, Mrki Brieg, Nisitsi, Borak, and Nanitsi.

Manganese has been worked on a small scale at Vranjkovci, which is in the immediate neighborhood of the Vareš iron mines. At the Vareš mines, a variety of hematite containing up to 12 per cent manganese is found. Other deposits of manganese ore occur in Blatnica Valley and at Ivanska, in central Bosnia.

Within the past 40 years, Bosnia has produced in all about 200,000 metric tons of manganese ore.

Outside of Bosnia, manganese occurs only in small quantities.

In Dalmatia, pyrolusite (manganese dioxide) exists in the neighborhood of Spizza, and dialogite (carbonite of manganese) has been found near Castel Lastua. Neither of these deposits has been worked.

Unexploited deposits of manganese ores are also known to occur in Serbia. Limonite containing a notable proportion of manganese is found at Guberevac, 10 kilometers south of Ripanj.

In Serbian Macedonia, pyrolusite, manganite, and dialogite are found in association with the lead ores, notably at Dobrovo, to the immediate south of Kratovo.

CHROMIUM

There are three main groups of chrome fields in the Kingdom, one (at Duboštica, 15 kilometers north of Vareš) in Bosnia and two apparently more important, known as the northern and southern groups—the former along the Western Morava River and the other along both slopes of the Shar Planina Mountain chain, along the Črna Rijeka (Black River), near Lake Doiran and near Lake Ohrid.

The rock formation in Bosnia where chrome is found consists principally of serpentines, gabbros, diabases, and tuffs, intrusive into cretaceous sandstones and limestones, and it is in the masses of serpentine that the chromite (chrome-iron ore) occurs. The chromite, occurring in the serpentines, is of eruptive origin and is believed to have been created by the differentiation of peridotite magma. The ore usually occurs in pockets without definite foot or hanging walls.

The percentage of Cr_2O_3 varies in the northern group from 40 to 46 per cent and in the southern group from 40 to 53 per cent. In the northern group the beds are of small extent and in the southern both large and small. The reserves in the northern group are apparently less, but transportation facilities are satisfactory and lead and copper frequently appear in coincidence.

The emplacements of the northern group are in the regions of Kruševac, Kraljevo, Užice, and Višegrad. They are along the Western Morava River and the narrow-gauge line which connects Stalać (on the main line Belgrade-Skoplje) with Sarajevo and eventually Gruž. None of the emplacements is more than 15 kilometers from the rail lines.

Prospecting has been on a small scale, and as the results are only partially known it is not possible to give categorical and definite conclusions. Geologists find this field interesting and state that at greater depths ore with a higher percentage of chrome may be found.

Exploitation has been more extensive in the southern group. The emplacements of this group are along the northern slope of the Shar Planina chain and its branches, the richest deposits so far discovered being nearest to the chain (in the southern part of this region).

The distance from the railway is 45 to 60 kilometers. Until the interests of the individual concession holders can be consolidated, exploitation of the small holdings will not be profitable and the costs of constructing feeders not justified.

The northern part of this same southern group is being prospected on a small scale by private concessionaires. The ore here analyzes 40 to 46 per cent. The distance from railway lines is only 8 to 12 kilometers.

The Ljuboten section is on the southern slopes of the Shar Planina chain and farther southward along the left branch of the Vardar River. The best parts of its emplacements are under the "Orashje," "Radunski," and "Goranski," formerly Turkish concessions, which are about 20 kilometers northwest of Skoplje. The remainder was declared to be State property and was ceded, after adjudication, to a foreign group in 1923.

The ore in the old concession assays as high as 53 per cent. In the remainder of the Ljuboten district chrome is found to assay 40 to 44 per cent. Only prospecting and preliminary works are now under way, and there is no production.

There are about 50 to 60 outcroppings of chrome in this region.

In 1917, the output of the Rakovica mine, the only one then exploited on an important scale, was 1,803 metric tons, but apparently the intensive operations of that year have greatly reduced the potentialities of this source of supply.

Only the "Orashje" and "Goranski" mines are now being exploited on a commercial basis, and their output amounted to 12,160 metric tons in 1925.

Other concessions appear to be approaching small-scale output.

The wealth of the country in chrome deposits is undoubted, but the possibility of securing considerable supplies in the near future is not encouraging.

The best-known sources of supply are already in the control of foreign groups.

ANTIMONY AND ARSENIC

The ores of antimony and arsenic occur usually as the sulphides of these metals. The ores of antimony are known variously as stibnite, antimonite, or antimony glance. These ores have been found in workable quantities in the Podrinje department of Serbia, the best known of the mines being the Kostajnik, Stolica, Zaječar, and Dobri Potok. At the last two named places small smelting plants for handling the antimony ores have been erected.

The old mining district of Cemernica, near Fojnica in Bosnia, has been mainly worked for gold and silver, but recent exploratory work has shown that antimonite occurs in such quantity as possibly to warrant further exploitation.

In Serbian Macedonia (South Serbia) antimony ores were mined, previous to the recent wars, at the Allchar mines, located near Rožden between Bitolj (Monastir) and Prilep. They are usually found in conjunction with ores of arsenic and chromium.

The antimony ores (antimonite) and the arsenic ores (realgar and orpiment) occur in stringers and lenses at the junction of crystalline schists and limestones. When extracted, they were washed and sorted at the mines and shipped on mule packs to Saloniki for transshipment overseas, principally to France.

Arsenic is also known to occur in Bosnia and Serbia. The Bosnian deposits are at Srebrnik, 20 kilometers north of Donja Tuzla, in northeastern Bosnia, and at Hrmsa, near Kiševo, in central Bosnia. In the former of these deposits, the ore consists of realgar (red arsenic sulphide), which occurs associated with dolomite in a vein about 2 meters thick. In the second, the arsenic occurs in the form of realgar and orpiment (yellow arsenic sulphide) associated with fluorspar. The vein, which is about 3 meters wide, occurs in intimate association with intrusive masses of porphyry in the Triassic limestones.

The Serbian deposits are found at Donja Tresnica, where realgar occurs associated with lead-bearing veins and at Crnče, near Krupanje, in the old mines of that locality. Arsenic ores are also reported at Rudnjak, Gokčanica, Čajetina, Vrba, and Vratarnica.

BAUXITE

Bauxite, the principal source of the metallic aluminum of commerce, is known in Dalmatia, Montenegro, Herzegovina, and Croatia-Slavonia. The exploitation of these bauxite deposits is very recent, having been begun during the war by the Austrians and Germans

FIG. 11.—Bauxite vein, Croatia-Slavonia

who sought to obtain a substitute for the French bauxite which they had previously imported. But, of these deposits, those in Dalmatia are the only ones which, by reason of their quantity, quality, and favorable location, appear to justify exploitation at the present time.

The aluminum oxide content in the Dalmatian ores averages about 53 per cent and the silica content averages about 2 per cent. Many of these bauxites are deep red in color and were originally mistaken for iron ores. In some cases a small amount of iron ore has been found associated with them. The rich superficial deposits appear to be widely spread in the Karst limestone country around Drniš, in central Dalmatia. In this region are the "Dili," "Kruševo," and "Umci" (southern Kalun) districts. All these districts haul their ore by wagon to Drniš, and from there by rail to the Adriatic port of Šibenik.

Other districts in which a certain amount of development work has been done but which are not being mined are:

(1) Žitnić, Moseć, Umljanović, Planjane, and Jesenica (all near Drniš).

(2) Sirski Brijeg, Buhovo, and Kočerin (all near Mostar, Herzegovina).

(3) The island of Rab (Arbe).

(4) Istria (Slovenia).

Several deposits of considerable extent, not belonging to any private companies, are known to exist on which little or no work has been done because of difficulties in communication and transportation. Among these may be mentioned the region of Ervenik and the region between Drniš and Mostar, where a number of quite important bauxite deposits are practically untouched because they are situated in mountainous regions, far from the railway and from the seacoast.

Some attempt has been made locally to manufacture various aluminum compounds from the bauxite, but, despite the fact that Dalmatia has some great hydroelectric plants, no attempt has yet been made to convert the bauxite to metallic aluminum.

CEMENT

Throughout the country, both public buildings and private houses are almost invariably built of brick covered with stucco or cement. Materials for the production of Portland cement are abundant in nearly every part of the Kingdom, and in the proximity of regions of considerable consumption.

In Serbia, cretaceous marls, which form admirable material for the purpose of cement manufacture, are found at Ripanj and Ralja, about 20 kilometers south of Belgrade. Here large factories have been erected, near the main railway, for its manufacture. Another Serbian factory is located at Popovac, near Paračin, where Paleocene calcareous marls have been employed with success.

In Croatia-Slavonia, the largest factory is located at Beočin, near Novi Sad. Oleocene calcareous marls are employed. This company also works a coal mine which is located close to the cement factory. At Podsused, in the neighborhood of Zagreb, is another large factory. Its annual pre-war production amounted to more than 50,000 metric tons. Other large cement works are located at Breme (Beremend). In the coastal district of western Croatia-Slavonia, the most important

cement works are located at Bakar (or Buccari), 8 kilometers south of Fiume.

Slovenia has three important cement works, the largest of which is located at Trbovlje. Other cement works are at Zidani Most and Dovje-Mojstrana. A new extensive factory is projected at Rajhenburg, a station on the Zagreb-Ljubljana Railway, 25 kilometers east of Zidani Most.

Of all the Provinces, however, Dalmatia is by far the most important producer of cement. On the peninsula of Pustizza and in the vicinity of Kotor (Cattaro) occurs a broad outcrop of bituminous Nummulitic limestone, which furnishes material of excellent quality for cement.

More important still is the outcrop of argillaceous marl, known locally as "tupina," which, without additions of any kind, is admirably adapted to the manufacture of cement. From 3 tons of tupina about 2 tons of cement is obtained.

The most important beds of tupina are located at Split (Spalato) and at Sucurac, Majdan, and Salona, in the immediate vicinity of Split. Another important outcrop is located about 30 kilometers south of Split at Omiš (Almises). But the tupina beds appear to be practically continuous from Split to Makarska, a distance of about 100 kilometers.

The tupina is not only used in the Dalmatian cement works but is exported in considerable quantity, principally to the cement factories in Italy. Before the war, about 500,000 metric tons were exported annually. Since then, however, the exportation of the raw tupina has greatly decreased and it totaled only 228,661 metric tons in 1924.

Probably in no other locality in the world is "natural" cement produced in such quantity and under conditions so favorable as regards ocean transportation as in Dalmatia. The tupina beds are located within a few kilometers of the seacoast, and the Dalmatian cement factories are all located directly on the coast; all of them, except the one in Split, have their own harbor and docking facilities, and all of them can load directly on the largest ocean-going vessels. For this reason, a large proportion of the output is exported.

The total yearly capacity of the cement factories in the Kingdom is placed at 1,100,000 metric tons, but the annual production does not exceed 700,000 metric tons. The Dalmatian plants supply about 60 per cent of the output and practically all of the exports, which totaled 341,628 metric tons in 1924 and 354,423 metric tons in 1925. Most of the foreign shipments go to Egypt and England.

Coal of high calorific power must be imported (most of it now comes from England), but it is comparatively cheap, since it can be delivered directly to the factories by ocean freighters. On an average, 1 ton of coal is used for every 5 tons of cement produced.

The essential raw materials used in the manufacture of hydraulic cement are (1) limestone, the chief ingredient of which is calcium carbonate, and (2) clay, which is composed mainly of hydroalumino silicates. The lime and clay are used in the proportion of 79 per cent lime and 21 per cent clay. Upon being ground and sintered the lime and clay combine to form anhydrous calcium aluminum silicate. In the presence of moisture it absorbs water of crystallization and "sets"—that is, it forms a solid rock of hydrous aluminum silicate.

It is known that certain "marls" contain the component materials required in the manufacture of cement (lime and clay), but it is rare to find such materials combined in the exact proportions and in such large beds as in Dalmatia.

The chemical analyses of three samples of this clayey marl or tupina chosen at different points by Prof. Tetmayer, director of the Technical High School at Vienna, gave the following results:

Components	Marl samples—		
	No. 1	No. 2	No. 3
	Per cent	*Per cent*	*Per cent*
Lime, CaO	42.62	42.93	42.80
Iron oxide, Fe_2O_3	3.27	3.23	3.30
Magnesia, MgO	1.04	.96	1.07
Gypsum, $CaSO_4$	1.26	1.44	1.30
Aluminum, Al_2O_3	2.60	2.72	2.86
Silica, SiO_2	13.43	13.42	13.19
Carbon dioxide, CO_2, and water	34.85	34.43	34.50
Alkalies (as difference)	.93	.87	.98
Total	100.00	100.00	100.00

Fifty-eight samples, analyzed solely for their clay content, gave the following results:

Assay	Percentage of clay	Assay	Percentage of clay	Assay	Percentage of clay
1	21.50	21	21.50	41	21.90
2	21.50	22	21.40	42	21.80
3	21.60	23	21.30	43	21.30
4	21.70	24	21.40	44	21.50
5	21.30	25	22.00	45	21.40
6	22.50	26	21.50	46	21.70
7	22.10	27	21.60	47	21.60
8	21.00	28	21.50	48	21.50
9	20.00	29	21.50	49	21.50
10	21.50	30	21.30	50	20.50
11	21.70	31	21.50	51	20.70
12	21.60	32	21.70	52	21.30
13	21.50	33	21.80	53	20.90
14	21.50	34	21.50	54	20.70
15	21.60	35	21.60	55	20.50
16	21.50	36	21.90	56	20.10
17	21.40	37	21.80	57	20.20
18	21.50	38	21.50	58	20.00
19	21.30	39	21.90		
20	21.20	40	20.80		

The advantage derived by the cement manufacturer in the use of argillaceous marls is due, in the main, to the fact that these natural mixtures of lime and clay are perfectly homogeneous.

The importance of homogeneousness is readily appreciated when one remembers that the production of cement is a chemical process (the combination of lime and clay to form calcium aluminum silicate) and that chemical combination does not take place "at a distance."

This fact has been clearly recognized by the manufacturers of "artificial" cement and much effort and ingenuity have been displayed in securing a more homogeneous mixture. It seems probable, however, that an artificial mixture can never be secured that is as intimate and homogeneous as the natural mixture.

Practical tests applied to this Dalmatian natural cement do not disparage the theoretical advantages claimed in its favor. Tests as to the tensile strength and capacity to withstand pressure (in kilos per square centimeter) have been applied to this cement (in normal mixture with sand) at various laboratories with the following results:

	Vienna Technical High School	Budapest Laboratory	Swiss Polytechnic High School	Milan Technical High School
Tensile:				
After 7 days	24.87	25.50	30.20	23.50
After 28 days	25.68	32.80	36.00	27.50
Pressure:				
After 7 days	364.00	254.00	364.00	292.00
After 28 days	368.00	417.00	434.00	383.00

Tests as to volume-constancy by cold and heat, such as those prescribed by Michalis, Reizel, Tetmeyer, Duval, Pruesing, Le Chatelier, and Edmenger, have been equally successful with this cement.

PETROLEUM AND NATURAL GAS

A number of localities in Croatia-Slavonia and Bosnia present conditions apparently favorable for the occurrence of petroleum, but up to the present time they have been exploited only to a very limited extent.

Great interest, however, has been taken in these petroleum deposits, and the State has granted about 90 concessions to prospect them.

The best known of the domestic petroleum districts is that of Bujavica, 10 kilometers west of Lipik. The presence of petroleum in this district was brought to the attention of the Austrian authorities by the peasants who had been annoyed by the presence of oil in the wells they dug for water.

The exploitation of the district was begun during the war, the first well being drilled by the Austrian military engineers in 1918. Borings were carried to a depth of 396 meters, through sandstone, limestone, and sands. Gas was encountered at a depth of 350 meters and again at a depth of 391 meters. Beyond this second occurrence of gas, the borings passed into oil-bearing sands 4 or 5 meters thick.

The gas and petroleum were probably formed in, or introduced into, the beds in which they now occur shortly after the depositing of the sediments. There was probably considerable evaporation of the lighter portions of the petroleum, as the oil encountered is of a thick, tarry nature with a specific gravity of 95.

As long as the Austrians were in control of the oil well, they obtained about 60 metric tons of petroleum per month from it, but nothing has been done since the Austrian evacuation.

The natural gas obtained here is of excellent quality, being 98 per cent methane. But after the retreat of the Austrian army the gas from this well was permitted to escape for four months, after which time it was capped by the authorities, the property having come into the possession of the Serb-Croat-Slovene State through the "sequester act." No commercial use is being made of the gas at present.

Shortly after the Government came into possession of the property they began the drilling of a second well, using the natural gas as power,

and they now have on hand sufficient equipment to drill two additional wells.

Near the Lipik district but between Pacraz and Koprivnica is an area in which some oil has been discovered. In 1920 a concession was granted to exploit this district. Very little development work, however, has been done on it up to the present.

Another Croatian oil-field, somewhat older than the one near Lipik, is located at Selnica, near the confluence of the Mur and the Drave Rivers, and about 90 kilometers northeast of Zagreb.

This field was opened in 1885. After the war the property was taken over by the State under the "sequester act," but was afterwards relinquished to the original owners. A considerable number of wells have been drilled in this field, some of which lasted only about a year. The best of these wells, known as "No. 3," has a depth of 170 meters. The crude oil has a specific gravity of 82 to 84. In 1920 the production was 350 kilos of oil per day. The rate of flow being slow, the oil was allowed to collect in a pond from which it was bailed out by a hand-operated winch. At the present time it is the only company in the Kingdom producing petroleum. The petroleum is refined at Brod. The total production, however, is very small.

In Bosnia, oil is found in seepages in the neighborhood of Tuzla and is probably associated with the salt wells in that district. It is believed that natural gas and oil occur in considerable quantity in this district, but no wells have been drilled for exploiting them.

There are numerous other places where oil has been observed but not exploited; these include Koprivnica, Ribojak, Lepavina, Ludbreg-Kutina, Kloštar-Ivanić, and Nova Gradiška.

ASPHALT

Asphalt is less widely distributed than petroleum, practically all of it occurring in the one Province of Dalmatia. The principal deposit is located near Vrgorac, 30 kilometers northwest of Metković. This deposit was exploited as early as 1753.

The asphalt in the Vrgorac district occurs in a spongy chalk or limestone. The asphalt content in these limestones varies considerably, but the average is said to be about 31 per cent. Exploitation has continued to a depth of 85 meters. During the war, the principal mine in this district was flooded with water and some of the shafts were ruined. But the water has been pumped out, the shafts have been repaired, and limited production was resumed in July, 1921.

The production prior to the war, from 1904, is shown in the following statement:

	Metric tons		Metric tons
1904	988	1910	173
1905	3, 894	1911	335
1906	2, 078	1912	2, 738
1907	2, 957	1913	1, 611
1908	2, 971	1914	1, 053
1909	2, 238		

The ore is hauled by wagon 5 kilometers to the Vrgorac-Metković Railway and, by rail, 25 kilometers to Metković.

At present, work at the mine is intermittent, only sufficient asphalt being produced to supply orders. In 1925, the output was 286 metric tons.

The more important of the other Dalmatian asphalt deposits are those at Mirlović, Škrip (on the island of Brac), Zabrije, Pleš (Gnili rat); and Vinišće (by Trogir).

The Dalmatian production of asphalt is far from being adequate to supply the needs of the country, the greater portion of it being imported from Trinidad.

MAGNESITE

Magnesite (magnesium carbonate) occurs in numerous localities in the Kingdom. In Serbia these deposits are found at Milicevac, Valjevo, Kozomor, Avala, Slivovica, Stragari, Drenova, Kostanitsi, and Kraljevo; in Bosnia, at Dubostica, Bijeli Klanci, and Blatnica; and in Slovenia, at Reichenau. Of these deposits, that at Milicevac in the Department of Rudnik (Serbia) is the only one which justifies exploitation under present conditions, and even from this mine there have been as yet no shipments of magnesite. The workings are known as the "Ivan Mines" and the concession to exploit them was granted in 1921. The beds, which are estimated to contain 2,655,000 cubic meters, or 6,645,000 metric tons of magnesite, appear to extend over 800 hectares, but the concession covers only 200 hectares. The deposit is exposed and readily accessible and hence may be quarried by "open work." Within the area embraced in the concession, deposits of brown coal have been discovered, which, it is hoped, may be used in the future exploitation of the magnesite mines.

The nearest railway station, Preljina, is 7 kilometers distant from the mines. A narrow-gauge railway connects Preljina with Zabroz (112 kilometers), which is a port on the Save River (tributary to the Danube). There is also a railway line connecting Preljina with Metković (482 kilometers), an Adriatic port. But the Preljina-Metković line (part of which is still in course of construction) can be used only to a very limited extent.

The principal interest attached to the agnesite deposits in the Kingdom arises from the fact that workable deposits of the ore are comparatively rare in the world. The greater part of the European production comes from Veitsch (Austrian Tyrol) and Euboea (Greece). The magnesite deposits of Tulare, Santa Clara, Sonoma, and Napa Counties in California furnish the greater part of the American production.

Magnesite is used principally in the manufacture of refractory materials and in the production of pure carbon dioxide for use in "soft drinks."

SALT

There are a few brine-evaporating plants along the Dalmatian coast, but their output is small, yielding only 7,245 metric tons in 1923, 6,022 metric tons in 1924, and 6,467 metric tons in 1925. The Kingdom is almost entirely dependent for its supply of common salt (which is a State monopoly) upon the extensive salt wells of Tuzla in northeastern Bosnia.

This State-owned salt deposit has been operated since very early times. The name of the district has always signified "salt"; in the Roman period it was "Salinas," in the first Serbian period it was "Soli," and under the Turkish occupation it became "Tuzla," which name it still retains.

The older part of the district, which was operated by the Turks, is known as Gornja Tuzla; the newer borings, which were made during the Austro-Hungarian occupation, are at Donja Tuzla.

The salt-bearing deposit is in the form of a lense having an area of about 1 square kilometer and a thickness of 100 to 160 meters. The upper surface of the deposit is reached at a depth of about 250 meters.

No attempt has been made to mine this salt by means of shafts, the upper material being too soft and porous. Instead of shafts, borings are made and these borings are then lined with pipes. The borings are initially 30 to 50 centimeters in diameter and taper gradually to 20 centimeters. On account of the great pressure on the pipes, due to the softness of the upper layers, it is necessary that the walls be reinforced by multiple piping.

In making the borings, gas and oil are not infrequently encountered but not in exploitable quantities. Beyond the gas and oil, the bores pass into deep red shales of the Oleocene age and these form the roof of the salt-bearing deposits. Since the opening of the works at Donja Tuzla, 34 borings in all have been made, and have all yielded brine.

One of the more recent borings (No. 26) is 360 meters deep and the lower 120 meters is through salt-bearing strata. The thickest bed of salt encountered in these strata consists of about 14 meters of practically pure rock salt. In some cases the salt from these deposits comes to the surface in the form of brine-bearing artesian wells; in other instances the brine must be pumped up.

The average content of salt in the brine at Gornja Tuzla is 240 grams per liter, while the brine at Donja Tuzla yields 350 grams of salt per liter. Of this, 320 grams consist of common salt (sodium chloride) and the remaining 30 grams consist of magnesium chloride and the sulphates of sodium, magnesium, and calcium.

These salt wells are regarded as one of the most valuable commercial assets of Bosnia. The production during the years 1923, 1924, and 1925 was as follows: 1923, 41,626 metric tons; 1924, 48,864 tons; 1925, 48,032 tons.

Of the brine produced, about 40 per cent is sent to the salt works at Samin Han and Kreka and the other 60 per cent is sold to the soda factory at Lukavac. The plant at Samin Han, erected in 1884, is equipped with six evaporating pans, with a total evaporating area of 780 square meters. In 1892 the evaporating plant at Kreka was erected. This plant is equipped with nine pans, with a total evaporating area of 1,535 square meters. The combined yearly production of Samin Han and Kreka is approximately 48,000 metric tons of crude salt. This is converted into 40,000 tons of fine salt, and 8,000 tons of coarse salt. The output is wholly consumed within the Kingdom.

FISHERIES

The fishing industry, although of only secondary importance, furnishes an appreciable contribution to the food supply and also a means of livelihood to those who live near the waterways, lakes, and coast.

FRESH-WATER FISHERIES

The numerous lakes and rivers abound in fish which are highly esteemed as delicacies, such as the sterlet, renowned for its caviar, which is caught in large quantities in the Danube.

Among the other fresh-water fish existing in large numbers in the Kingdom are the eel, catfish, carp, and pike.

In the mountain regions several species of trout are found in sufficient quantities to furnish excellent sport. On lakes Skadar, Doiran, Ohrid, and Prespan, all of which are located in regions deficient in food production, fishing is an important local industry which, in a measure, supplements the inadequate agricultural output.

As a rule, little has been done to organize the fresh-water fishing industry, but there are several notable exceptions. The government maintains a trout-breeding station on the Bosna River near Sarajevo which is periodically stocked with young fish, the full-sized trout being withdrawn and sold. A Belgrade firm maintains on the Danube River a natural basin in which undersized young fish are placed for fattening and development. Another firm which exploits the forests around Belišće, Croatia-Slavonia, maintains fish ponds covering 170 hectares, from which 300,000 kilos of catfish, carp, and other fish are exported annually.

SALT-WATER FISHERIES

Sea fishing is one of the important industries of Dalmatia, and a considerable portion of the population gains its livelihood in this way. During 1924 the total catch on the Dalmatian coast amounted to 4,153,735 kilos, valued at 38,400,000 dinars.

The fishing fleet comprises 3,560 units, totaling 6,111 tons and manned by approximately 12,000 men.

Sardines and tunny form the bulk of the catch. In pre-war days the Dalmatian fisheries yielded about 5,000,000 kilos of sardines and a like quantity of tunny, but lack of equipment and primitive methods have considerably reduced the return. During the first six months of 1925, only 1,058,309 kilos of sardines were taken.

FISH-PRESERVING INDUSTRY

The sardines and tunny are preserved in salt or oil. Prior to the war 32 factories were engaged in this industry as compared with 9 to-day. This decline is due in part to the fact that the most important of these factories were foreign and were, until recently, under sequestration. Another factor which has adversely affected the industry is the inability to obtain sufficient salt to take care of unusually large catches.

In 1924 the output of the factories totaled 959 metric tons of salted fish and 154 metric tons of fish preserved in oil. In normal pre-war years approximately 2,400,000 tins of sardines and 1,500 metric tons of salt fish were produced.

A very large part of the production is sold abroad. The most recent export figures are as follows:

Classes of fish	1924		1925	
	Metric tons	Dinars	Metric tons	Dinars
Fresh	1,443	13,960,431	2,268	13,847,134
Preserved	190	6,227,319	38	1,254,840
Salted or dried	1,287	15,916,823	888	8,335,923
Total	2,920	36,104,573	3,194	23,437,897

Italy purchases about 20 per cent of the fresh fish and more than 80 per cent of the prepared fish.

FURS OF WILD ANIMALS

The forests of the Kingdom abound in fur-bearing animals, and they contribute considerably to the national wealth. Estimates place the annual kill of the various kinds of wild animals as follows: Hares, 700,000 to 1,200,000; foxes, about 200,000; martins, about 25,000; polecats, about 25,000; badgers, 40,000 to 50,000; wolves, about 1,000; wild cats, about 20,000; bears, 50 to 100; dormice, 1,000,000.

In addition to the animals enumerated, several thousand otter and squirrels are annually killed. In general, domestic furs are of good quality, but those of the white and yellow martin, otter, and wild cat are the most highly prized. Naturally, the quality of the skins depends upon the season of the kill. The foxes are usually red, but white and silver foxes are also to be found. Strangely enough, the peasants consider silver fox skins as inferior to the others. A very large part of the raw furs is exported. In 1924 the shipments abroad of the skins of wild animals totaled 201 metric tons and in 1925, 121 metric tons.

Despite the large number of pelts collected in the Kingdom there is really no domestic industry engaged in their preparation. Finished furs are therefore imported from abroad.

An effort is being made now to develop a fur industry and to train artisans in the method of preparation of the raw skins. There is a strong current of opinion in favor of a high import duty on finished furs and of restrictive export regulations on raw furs in order to give impetus to the domestic treatment of the pelts.

PRIMARY POWER IN INDUSTRY

Power for industry is supplied by water mills, steam engines, oil-burning engines, and hydroelectric stations. No statistics are available showing the total amount of power developed, though the hydroelectric plants have a capacity of 165,685 horsepower.

Practically every locality has a water wheel for grinding grain and for other small needs of the agricultural element, but these do not add greatly to the industrial equipment of the country. The power developed by oil-burning engines is likewise too small to be an important factor.

STEAM

Steam unquestionably is used more than any other form of energy, and although statistics are not available as to this type of motive force, an estimate may be reached by considering the amount of coal consumed. The total annual consumption of coal by the industries, exclusive of the railroads and navigation companies, amounts to about 2,000,000 metric tons, of which one-fourth is imported. The foreign coal averages about 7,000 calories per gram, while the domestic coal used in the industries averages only 4,500 calories per gram.

Deducting 250,000 metric tons of coal consumed in burning cement and firing bricks, the quantity utilized in the production of energy is about 1,750,000 metric tons, of which 400,000 metric tons are of 7,000 calories per gram.

Most of the larger municipalities, including Belgrade, Zagreb, Ljubljana, and Subotica, derive electric power for lighting and street-car service from steam power. In Slovenia and Dalmatia, power

both for electric lighting plants and for industrial establishments is, as a rule, hydroelectric, but in the eastern part of the country motive force for all purposes is almost entirely produced by combustion.

HYDROELECTRIC POWER

Following is a statement as to hydroelectric power in the Kingdom:

Provinces	Potential power at low water	Potential power with water at average level	Power now being exploited
	Horsepower	*Horsepower*	*Horsepower*
Serbia	1,265,568	3,796,974	7,529
Bosnia and Herzegovina	621,141	1,864,423	11,350
Slovenia	260,308	780,224	70,836
Montenegro	280,089	840,257	
Croatia-Slavonia	356,836	1,010,268	6,240
Dalmatia	59,700	179,100	69,600
Voivodina	139,280	477,840	130
Total	2,982,922	8,949,086	165,685

Despite the fact that the utilization of water power is still exceedingly small, it nevertheless represents an annual saving of approximately 600,000 tons of high-grade coal.

The electrification of available water power has been extensively carried out in Slovenia, where the majority of the electric plants are dependent on the water power, steam being used only where the construction of hydroelectric plants would entail disproportionately large initial investments.

Those electric plants dependent on combustion are mainly of the smaller and older types, and many of these are gradually being transformed into hydroelectric stations.

The largest hydroelectric plant in the Kingdom is located on the River Drave at Fala, Slovenia. It was erected just prior to the war by the Swiss banking consortium, which has recently secured a renewal of the concession.

The Fala plant is similar in construction to the low-pressure power plant in Muehlberg, Switzerland; the River Drave is confined by walls 20 meters high, built of concrete, within which the locks are built. The entire length of the dam, including the frontage of the engine house, is about 180 meters. The engine house is planned to contain seven turbine-generator groups, of which five have already been erected. Each of these groups has a capacity of 5,200 kilowatts. The generators supply the current in the form of a three-phase alternating current, having a frequency of 50 periods per second, and a tension of 10,000 volts.

The plant is situated in the extreme northern part of Slovenia, near the present boundary between Yugoslavia and Austria. At the time of the plant's erection it was in Austrian territory, and the intention was then to supply motive power to Graz and other Austrian industrial centers to the north of Fala. But the Yugoslav Government, desiring to develop its own industries, will not permit the current to be transmitted across the frontier into Austria or other foreign countries, hence the Fala company has been compelled to seek a sale for the current in Slovenia.

At the present time, the plant is supplying current for the carbide, nitrogen, and cyanamide factory in Ruše (6 kilometers distant from Fala). This factory absorbs from 10,000 to 18,000 horsepower. A six-year contract provides for the sale of the current at a remarkably low rate. A high-tension (10,000-volt) transmission line also conducts the current to Maribor, supplying the city with light and various industries in or near Maribor with power. A Maribor-Čakovec net is projected which will supply all the neighboring communities with light and power.

Futhermore, a high-power transmission line of 80,000 volts is being constructed to Laško, where a large transformer plant is in course of erection, and from Laško a network of 35,000-volt transmission lines will lead to Celje, Zidani Most, Hrastnik, and to the great mines at Trbovlje. The high-voltage transmission lines to these localities will be built by the Fala company, but at these plants the current will be sold to various enterprises, often cooperative societies, which will build transformer plants and distribute the current at low voltage for electric lighting and industrial uses. Such companies are already formed in Trbovlje, Hrastnik, Zagorje, Mozirje, near Ljubljana, and Podbica, near Podnart.

In addition to the great hydroelectric plant at Fala, Slovenia has a large number of smaller plants, many of them of 1,000 horsepower or less. Thus on the Drave and its tributaries are located hydroelectric plants at Privolje, Spodjni Dravograd, Slov. Gradec, Morenburg, Buhred, Ruze, Poljane; on the Savinja and its tributaries, the electrical works in Ljubno, Gornji Gradac, Mozirje, Šoštanj Vihanj, Lehsa, Polzeli St. Peter, and Gotovlje near Zalec; on the Save and its tributaries, in Kranjska Gora, Poljana, Quesnjica, Gorica, Podbica near Podnart, Smarje and Radomlje, near Kamnik; further, in Monsa, Dobrava, near Ljubljana, and in Novo Mesto.

On the Zavrsnica, a left tributary of the Save, a high-pressure plant was erected by the military authorities during the war. The plant is equipped with two turbines, and obtains an average of 1,700 horsepower, from which the surrounding territory is supplied with electric light.

Ljubljana and surroundings receive a portion of their electric current from the works in Tacna (200 horsepower). This network comprises—in addition to Ljubljana—Bizmarija, Sv. Vid, Dravlje, Tacna, Ježica, Zg. Siska, and the country surrounding Ljubljana, with the exception of Spodnja Siska.

It is planned to erect a hydroelectric plant on the Save near Medvode for the purpose of furnishing Ljubljana with 10,000 horsepower, but at present the Ljubljana municipal electric plant, which furnishes Ljubljana with the greater portion of its electric lighting current, is a steam-electric plant.

In addition to these public works, there exist a number of private power houses.

In the development of electric power in Dalmatia the power of the waterfalls on the Cetina River, near Split (Spalato), and of the falls on the Krka River, near Šibenik, is exploited.

The Cetina River is the outflow of two open "poljes." From the point where it breaks through the Mosor Mountain Range it has, in the short distance of 36 kilometers, a series of cataracts and waterfalls which yield an exploitable fall of 225 meters. The hydraulic in-

stallation on this river has a maximum capacity of about 74,000 horsepower, but the electric installation at the plant is capable of producing only 36,000 horsepower.

The Krka River has cut its way through three folds of the Dalmatian Carac. Two waterfalls are available for exploitation, the upper one at Manojlovac and the other at Jaruge. Distributing centrals at each of these falls have been erected, the one at Manojlovac having a capacity of 25,000 horsepower and that at Jaruge of 7,000 horsepower.

Except for a small portion of the current which is sold for electric lighting in Šibenik and Split and for power to a number of small industries, practically all the power developed by the plants on the Cetina and Krka Rivers is utilized by their carbide and cyanamid factories located in Crnica, a suburb of Šibenik, and in Dugi Rat, a suburb of Omiš. These two factories are similar, as regards operation and products, to the one at Ruše, Slovenia.

In Bosnia, the only hydroelectric plant of importance is the one erected at Jajce on the waterfalls of the Pliva, a tributary of the Vrbas River. The water power is here obtained from two conduits 1.8 meters in diameter, with a head of 65 meters. The water operates 10 turbines of which 8 have a capacity of 1,000 horsepower each and two of 600 horsepower each. The turbines are directly connected with electric generators. Eight of the generators are alternating current and two direct current (the direct-current generators are not in use at present). The total electric power developed is about 6,400 kilowatts. The electrical equipment at this plant is more than 24 years old, and is somewhat out-of-date. It is believed that with a modern electrical installation the power would be very greatly increased.

The hydroelectric plant at Jajce was erected for and owned by an electrochemical works engaged in the manufacture of ferromanganese, ferrosilicon, and silico-spiegel. Both the electric plant and the chemical works are now the property of the State.

The Jajce chemical works was one of the first in the world to produce ferrosilicon by the electrical process. In the early part of the plant's existence, notably from 1904 to 1907, a considerable amount of the ferrosilicon was exported to the United States as well as to various European countries. At the present time it is exported only to England.

The other hydroelectric plants in Bosnia are very small, not exceeding 350 horsepower. Small plants of this kind are located at the Trappist Monastery in Banja Luka, and in the communities of Travnik and Bihać.

The most recent hydroelectric development in Croatia-Slavonia is the plant erected at Skrad. The mountain stream, Zeleni Vir, with an average flow of 2,000 liters per second and a head of 60 meters furnishes the power for two high-pressure turbines directly connected to generators. One thousand two hundred horsepower is produced as three-phase alternating current at 5,000 volts. The communities of Skrad, Ravna Gora, Brod Moravice, and the large freight station at Srpske Moravice receive power from the plant, and the lines are soon to be extended to the town of Dolnice.

Another power plant of about the same capacity as the Zeleni Vir is in Sušak. This plant develops 1,400 horsepower.

Karlovac is the only Croatian town of importance that is dependent on hydroelectric power stations for the electric current. This city, situated at the juncture of the Korana and Kupa Rivers, is rapidly becoming an industrial center of importance, new industries being attracted there by reason of the cheap electric power.

The principal hydroelectric plant there is owned by the municipality. The plant is situated at Ožalj on the Kupa River, 18 kilometers distant from the city. It is equipped with three turbines directly connected with three generators producing alternating, three-phase current at 5,000 volts. At average water level the plant has a capacity of 2,400 horsepower, but at low water the capacity falls as low as 800 to 1,000 horsepower. As an auxiliary source of power, the plant is now being equipped with Diesel engines capable of developing 1,000 horsepower.

In addition to the municipal power plant there are a number of hydroelectric plants in the vicinity of Karlovac, which have been erected by private companies for the purpose of supplying power for their own factories.

The hydroelectric plant on the Korana River near Karlovac has one turbine and develops a maximum of 500 horsepower.

A milling company has constructed in Karlovac a hydroelectric plant with a maximum capacity of 300 horsepower.

There is also a plant on the Mrežnica River, from which 400 horsepower is obtained at low water and about 1,300 horsepower at high water.

Zagreb, the principal city of Croatia-Slavonia, is dependent on steam power for the development of the electric power, but the city has a project for a hydroelectric plant to exploit the water power of the Save at Krško-Brežice, with a mean annual capacity of 18,500 horsepower (maximum 23,000, minimum 10,500 horsepower).

In Serbia there is no hydroelectric plant of importance. A number of the smaller communities, however, derive their electric current for lighting purposes from hydroelectric plants. The largest of these plants is at Ivanjica, its power being obtained from the Morava River. This plant develops a maximum of 1,600 horsepower, which is used for electric lighting and for industrial purposes. Smaller hydroelectric plants with maximum capacities ranging from 700 horsepower downward to about 100 horsepower are established at St. Petke (in the Niš township), Sepot (near Ruska), Gamzigrad, Vučje, Kruševac-Obelicevo, Dracin (Degurič), Užice, and Veliko Gradište.

MANUFACTURING INDUSTRIES

The industrial development of the Kingdom of the Serbs, Croats, and Slovenes has received very little attention up to the present time. The existing industries have for the most part grown up for the double purpose of satisfying domestic requirements and of transforming the natural products of the country. The principal industries of this kind are milling, the drying of prunes, the manufacture of beer and wine, the refining of sugar, the tanning of hides and skins, and the utilization of forest products. It is true that there are a number of important factories turning out products which are not consumed to any appreciable extent within the Kingdom, and which depend upon foreign markets for the disposal of their output. The

principal products of this nature are chemicals, such as cyanamide, carbide, ferro-silicon, caustic soda, tannin, and tanning extracts.

There are also a number of cotton and woolen mills which are dependent upon foreign raw materials but have been established for the purpose of satisfying domestic requirements.

The importance of the industrial development of the country can be estimated from the number of the workmen in the factories, which totals only 205,000, and from the amount of the motive force utilized, which probably does not exceed 500,000 horsepower. Most of the industries are in the early stages of development. The lack of capital has in the past seriously restricted the industrial progress of the country, but it is believed that the future will see a steady expansion of the industrial output. Raw materials, latent water power, and labor, all of which are abundant, should bring a rapid development of the manufacture of those articles which are now imported from abroad. The protective tariff policy of the Government is also designed to foster this industrial awakening. In other words, the potential forces of production exist, and only organization and capital are wanting.

Milling, sugar refining, the manipulation of tobacco, the dehydration of prunes, the production of wine and beer, and the smelting of minerals have all been dealt with previously in those sections of this volume concerned with the raw materials upon which these industries are based.

HOME INDUSTRIES

Home industry still prevails to a great extent, and homemade products still supply a very large part of the articles of general consumption.

The costumes of the peasants are usually of wool clipped from their own sheep and spun, woven, and fashioned by their womenfolk. The footwear in the country districts is the "opanka," a form of moccasin or sandal made by hand of tanned or untanned skins.

Home-clipped wool is also worked into rugs resembling Navajo blankets. Peasant linen is found in practically every district and is frequently embroidered in brilliant colors and metal, each region having its own distinctive pattern.

Peasant lace is made throughout the entire Kingdom, the pattern and fineness varying according to each region and to the taste of the individual.

Originally there was no trade in these articles, as each family consumed its entire production, but in recent years a number of stores have undertaken to collect and to sell such articles.

Wood carving has also engaged the attention of the peasant element, but such articles are almost entirely reserved for the decoration of the maker's own home.

Copper work of considerable artistic skill is produced in the individual homes and by small artisans in those Provinces which were formerly under Turkish control. The finished products such as bowls, trays, and Turkish coffee sets are much sought in the bazaars where they are sold.

Peasant silver filigree work is to be found throughout Herzegovina and South Serbia. Homemade pottery for the common domestic needs is made in every district in the country but rarely has any artistic value.

FOODSTUFFS

In general, the domestic production of prepared foodstuffs is sufficient for the needs of the country.

ALIMENTARY PASTE, CAKES, AND BISCUITS

Alimentary paste, cakes, and biscuits are made by the same factories. There are about 30 undertakings of this nature in the Kingdom, of which 12 are in Dalmatia. The annual capacity of these plants totals 25,000 metric tons of macaroni and other alimentary paste, and 3,300 metric tons of cakes and biscuits, but they rarely work to full capacity. The actual production of macaroni and alimentary paste during 1923 was only 7,000 metric tons. The output is sufficient to meet the domestic requirements.

MEAT AND MEAT PRODUCTS

The large numbers of livestock in the Kingdom have naturally led to the development of a meat and meat-products industry. Although there are no packing houses in the country, practically all of the large centers have abattoirs which are engaged in the preparation of meat, lard, sausages, salami, bacon, and ham. There are also a number of private plants which cure meat. The large establishments work primarily for foreign markets, and the domestic consumption is satisfied by small local butchers.

There are no available statistics of production, but an indication of the importance of the industry is furnished by the export figures, which in 1924 and 1925 were as follows:

Items	1924	1925	Items	1924	1925
	Metric tons	*Metric tons*		*Metric tons*	*Metric tons*
Fresh meat	12,016	11,981	Ham	37	71
Lard	67	80	Other meats	378	629
Sausages	166	78			
Salami	316	92	Total	13,725	13,891
Bacon	745	960			

In recent years there has been a distinct decline in the exports of livestock and an increase in the foreign shipments of meat and meat products. It is probable that this tendency will continue and that the production of meat and meat products will increase.

CANNED VEGETABLES

The pickling of peppers and cucumbers and the preparation of sauerkraut are done by practically every household in the country. There are, however, in the cities and large towns a number of establishments manufacturing such products for urban consumption. The canning of fresh vegetables, especially peas, tomatoes, and haricots, is fairly well developed. There are several large factories in the country engaged in this industry, the most important being at Kragujevac, Novi Sad, Zagreb, Veliki Bečkerek, and Šmarca-Kamenik, Slovenia. The output of these concerns is sufficient to satisfy the domestic consumption, but it is not large enough to admit of any exportation.

PRESERVED FRUITS

The dehydration of prunes is one of the most important industries in the Kingdom and has already been described in this volume. (See page 150.)

The drying of Dalmatian sour cherries is also a fairly important industry, the output of which is sufficient to permit of an annual exportation of about 450 metric tons.

The production of plum marmalade ("pekmez") is sufficiently large to satisfy domestic requirements and to yield a small exportable surplus. The preserving of plums is not done in factories but is a home industry engaging the attention of the peasants in the plum-growing regions.

The canning and preserving of other fruits is largely limited to the factories engaged in the preparation of vegetables which have already been cited. The output is about equal to the domestic demand.

The imports of such products are small and are made up principally of pineapples and other fruits that are not grown in the Kingdom.

CHEESE

Cheese is one of the principal articles of diet of the peasant class and is consequently made on practically every farm in the Kingdom. A large part of the production is in the form of soft white cheese which is, for the most part, consumed on the farms. However, the Caccio Cavallo cheese, which is generally made of sheep's milk (although frequently goat's or cow's milk is added), is produced in large quantities in Serbia and the Voivodina. The annual production is estimated at about 3,000 metric tons, a large part of which is exported.

The exports of Caccio Cavallo in 1925 totaled 2,018 metric tons and of ordinary cheese 184 metric tons.

CHOCOLATES, CANDIES, AND BONBONS

The domestic consumption of chocolates, candies, and bonbons is almost entirely satisfied by the production of factories in Belgrade, Zagreb, Novi Sad, and other centers.

High-grade candies, bonbons, and Swiss chocolates are imported in small quantities to meet the demands of that very small part of the population which can afford articles of luxury.

LIQUEURS

There are a considerable number of factories in the country manufacturing liqueurs, of which 15 have a comparatively large output. The production is sufficient to satisfy the usual needs of the population, and only a small quantity of foreign liqueurs is imported for the upper classes.

CHEMICAL INDUSTRY

The manufacture of chemical products is unusually well developed for an agricultural country that has paid little attention to industrial expansion. The forest resources have been responsible for a wood chemical industry of great potentialities. The erection of four large hydroelectric stations has resulted in an electro-chemical industry vastly in excess of the needs of the country and capable of almost unlimited development. In addition to these two main branches of the

chemical industry, there are important factories engaged in the production of caustic soda, aluminum salts, sulphuric acid, and superphosphates. In general, the production of chemicals is sufficient to satisfy the entire domestic needs of the Kingdom and to furnish an appreciable surplus for export.

TANNIN AND TANNING EXTRACTS

The manufacture of tannin and tanning extracts is one of the largest industries in the Kingdom and was developed under the Austro-Hungarian régime in the Provinces of Slovenia and Croatia-Slavonia in order to supply the needs of the tanneries of the Dual Monarchy. In pre-war days this was a very flourishing industry, but the new frontiers separated the factories from their markets and as the tanneries in the Kingdom have not developed to a point where they can absorb the domestic production, this industry is now going through a period of stress.

In the production of wood extracts, chestnut and oak wood are usually treated in open vats, although recently the more modern process of using steam pans is coming into use. Sound chestnut wood and oak waste supply the necessary raw materials. The use of chestnut is tending to deplete the forests of this type of trees.

The Slovenian plants, of which there are five, are closely connected with local tanneries which consume the entire output. These factories are capable of producing about 8,500 metric tons annually, but their output is far below maximum.

The Croatia-Slavonian factories work almost entirely for the export trade, as only about 5 per cent of their production is consumed within the Kingdom. There are five important factories in this province, located at Belišće, Županje, Našice, Sremski Mitrovica, and Sisak. Their joint capacity totals from 45,000 metric tons to 50,000 metric tons annually, but the production ranges only from 10,000 metric tons to 12,000 metric tons. In 1924 these Croatia-Slavonian factories produced 10,180 metric tons, of which 530 metric tons were consumed within the Kingdom and 9,670 metric tons were exported. The sale of the output of these factories is centralized in a syndicate at Zagreb which maintains representatives in most of the large importing countries.

The future of this industry depends almost entirely upon the development of the domestic tanneries.

DRY DISTILLATION OF WOOD

There are two large factories engaged in the dry distillation of wood. The larger plant, which is at Teslić, Bosnia, is equipped to treat annually 300,000 cubic meters of beechwood, but it is now using only about 200,000 cubic meters a year. Its output includes 27,000 metric tons of charcoal; 270 metric tons of methylated spirits; 800 metric tons of methanol; 130 metric tons of formaldehyde; 70 metric tons of other methyl distillates; 760 metric tons of acetone; 80 metric tons of ethylacetone; 140 metric tons of acetic oil; 3,500 metric tons of tar or pitch (or 200 metric tons of creosote and 100 metric tons of light oil); 700 metric tons of resins, and 700 metric tons of sodium acetate.

The factory is contemplating the installation of equipment for the manufacture of acetic acid.

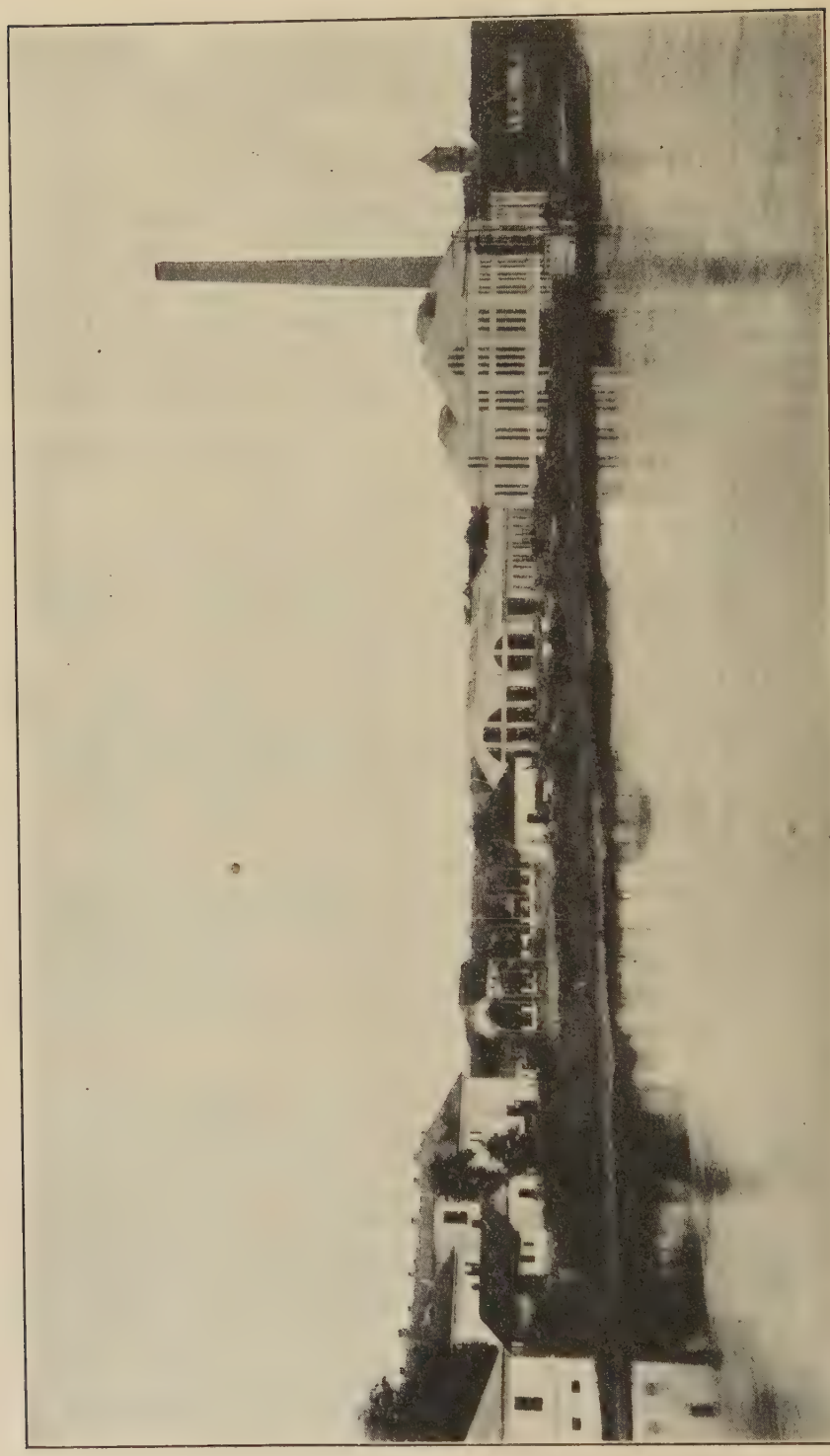

FIG. 12.—New electric plant at Osijek, constructed by an American firm, with American capital

The other plant, which is at Belišće, Croatia-Slavonia, treats from 100,000 to 120,000 cubic meters of beech and pine annually. Its output includes 5,000 metric tons of charcoal; 1,500 metric tons of calcium acetate; 700 metric tons of acetic acid; 120 metric tons of formaldehyde; 2,100 metric tons of pitch; 550 metric tons of resins; 40 metric tons of chloroform; 120 metric tons of sodium acetate; 40 metric tons of lead acetate; and 5 metric tons of creosote.

A large part of the production of these two factories is sold abroad. The exports of such products in 1924 totaled 6,053 metric tons.

IMPREGNATION OF WOOD

Two factories in Slovenia and one each in Croatia-Slavonia, Bosnia-Herzegovina, and Serbia are engaged in the impregnation of wood. These factories treat railway ties, telegraph and telephone poles, and other forms of wood which require a process of preservation.

The largest factory, at Karlovac, is a branch of the tannin factory at Našice and is equipped to treat 1,500,000 poles or ties. These impregnation plants have a capacity in excess of domestic requirements.

CELLULOSE

Despite the enormous forest resources there are only two cellulose factories in the Kingdom. The only one of real importance is located at Drovar, Bosnia-Herzegovina, and was erected to utilize the wood-waste of the Dobrljin Drvar timber industry. This factory has an annual capacity of 18,000 metric tons of cellulose, but the production probably does not exceed 50 per cent of the capacity. As domestic paper factories require only from 5,000 to 8,000 metric tons of cellulose annually, a considerable part of the output is available for export. Only unbleached cellulose is produced by the factory, and the paper mills are obliged to import the bleached product from abroad. The other factory, which is at Medvode, Slovenia, has an annual capacity of 1,900 metric tons. The output is entirely absorbed by the local paper mill, of which it is a subsidiary.

TURPENTINE AND ROSIN

There are a number of small enterprises in this Kingdom distilling turpentine, but there is only one factory which has obtained any degree of success and which may be considered as important. This plant is located at Busovača, Bosnia. The process employed is that of soaking pine chips in an extracting liquid. The factory is capable of treating 20 metric tons of wood daily and produces from 240 to 360 metric tons of turpentine and from 1,200 to 1,800 metric tons of rosin yearly.

MATCHES

There are five match factories in the Kingdom—located at Osijek, in Croatia-Slavonia; Vrbovska and Dolac in Bosnia-Herzegovina; at Novi Vrbas, in the Voivodina; and at Ruše, in Slovenia. The total production is absorbed by the State Monopoly.

Their total annual capacity amounts to 300,000,000 boxes, containing from 55 to 60 matches each. As this is in excess of the domestic requirements, the output is restricted to actual demand.

ELECTROCHEMICAL INDUSTRY

There are four electrochemical factories in the Kingdom located at Jajce in Bosnia; Ruše, Slovenia; and Dugi Rat and Šibenik in Dalmatia. All of these factories draw their motive power from large hydro-electric stations which were erected for the purpose of manufacturing calcium carbide. They have a combined annual capacity of nearly 100,000 metric tons.

The plant at Jajce which obtains its motive force from the waterfalls of the same name is capable of producing 20,000 metric tons of calcium carbide and 8,500 metric tons of ferro-silicon annually. The difficulty of marketing the output has resulted in restricted production.

A company which has two power plants, one on the River Krka, near Šibenik, and the other on the Cetinje River, at Dugi Rat, is engaged in the manufacture of calcium carbide and in the transformation of the carbide into cyanamide. The Dugi Rat factory has a total capacity of 20,000 metric tons of carbide annually, while the one at Šibenik is capable of producing 18,000 metric tons and of converting 7,000 metric tons into cyanamide each year. The production of these two factories in 1923 amounted to 15,113 metric tons of carbide and 4,554 metric tons of cyanamide.

The Ruše factory draws its motive force from the hydroelectric station at Fala and has a yearly capacity of 4,000 metric tons of carbide, or of cyanamide. The difficulty of finding a market for these two products has determined the management to install equipment for the production of ammonia and carbonic acid, in the manufacture of which cyanamide will be used as a raw material. The initial results of this installation have been satisfactory, but the production figures are not known.

The actual production of the four factories probably does not exceed 27,000 metric tons of carbide, of which at least two-thirds is exported. The exports of carbide during 1925 amounted to 17,402 metric tons. The production of cyanamide amounts to about 15,000 metric tons, of which all but 300 metric tons are exported.

The entire production of ferrosilicon, all of which is from the Jajce plant, is exported. In 1925 the shipments abroad totaled 2,869 metric tons.

SUPERPHOSPHATES AND SULPHURIC ACID

There are factories at Subotica, Koprivnica, and Hrastnik producing superphosphates and sulphuric acid. The total annual capacity of these factories is as follows:

Factory at—	Superphosphates	Sulphuric acid
	Metric tons	*Metric tons*
Subotica	75,000	30,000
Koprivnica	60,000	60,000
Hrastnik	20,000	10,000
Total	155,000	100,000

Practically the entire output of sulphuric acid is utilized in the production of the superphosphates by these plants.

The Hrastnik factory also produces considerable quantities of hydrochloric acid, crystallized soda, Glauber's salts, and other chemical products.

As the domestic consumption of all artificial fertilizers does not exceed 40,000 metric tons a year, the combined output of these factories is necessarily far below maximum and probably does not exceed 34,000 metric tons.

CAUSTIC SODA

A factory at Lukavac, Bosnia, is equipped to produce annually 24,000 metric tons of ammonium carbonate, of which 5,000 metric tons can be converted into caustic soda and 1,200 into bicarbonate of soda. During 1923 the output of this factory totaled 22,687 metric tons of ammonium carbonate, 15,337 metric tons of carbonate of soda, and 3,989 metric tons of caustic soda. The production since then has apparently increased. The domestic consumption of carbonate of soda is placed at about 2,000 metric tons and that of ammonium carbonate at 3,000 metric tons. The exports of ammonium carbonate during 1924 totaled 19,386 metric tons. The factory, therefore, is working at practically full capacity.

Caustic soda is also produced by the Jajce electrochemical factory as a secondary product. The total capacity of this latter plant, however, does not exceed 1,700 metric tons annually.

Both the Lukavac and Jajce factories draw their salt supplies from the Government mines at Kreka, Bosnia. The exports of caustic soda during 1925 amounted to 2,508 metric tons.

The State chemical factory at Moste near Ljubljana transforms Dalmatian bauxite into aluminum salts. The capacity of this factory is 4,000 metric tons of oxides, 1,000 metric tons of hydrates, 3,000 metric tons of sulphates and 200 metric tons of alum. The total output of the factory during 1924 is placed at 5,100 metric tons. The entire production is exported.

PETROLEUM REFINERY

The only petroleum refinery in the Kingdom is at Brod, and it is capable of treating 35,000 metric tons of crude oil of asphalt base or 25,000 metric tons of crude oil of paraffin base annually.

Another refinery which is in the course of construction at Ripanj, Croatia-Slavonia, was expected to start operations during 1927.

GLUE

There are five factories in the Kingdom manufacturing glue from bone and animal waste. These are at Ljubljana, Šoštanj, Zemun, Osijek, and Belgrade. Only the factories at Ljubljana and Zemun are now producing. The annual production of the former is 800 metric tons and of the latter 400 metric tons. The Belgrade factory is now producing only spodium, an activated carbon which is used by the sugar refineries. The plant is capable of producing 1,000 metric tons of spodium annually, but the actual output is about 300 metric tons.

INDUSTRIAL ALCOHOL

There are 14 industrial distilleries in the Kingdom, with a total capacity of 247,546 hectoliters, and 51 small local agricultural dis-

tilleries, with a total capacity of 47,980 hectoliters. The total production in 1924 amounted to only 68,959 hectoliters and in 1925 to 146,669 hectoliters.[19] The actual production in the Kingdom depends almost entirely upon conditions on the world markets, because domestic requirements have been reduced to a minimum as a result of the heavy consumption tax.

SOAP

Soap is manufactured in practically every Province of the Kingdom because of the abundance of raw materials. There are 26 factories in the Kingdom with a total capacity of 36,000 metric tons. The output, however, does not exceed 18,000 metric tons, of which 80 per cent is of low-quality toilet soap and 20 per cent of better-grade toilet soap. With the exception of the finer grades of toilet soap the national consumption is supplied by domestic factories, while laundry soap is practically all imported.

CANDLES

There are 15 factories engaged in the manufacture of candles, with a total annual capacity of 5,000 metric tons. The actual production is about 2,400 metric tons. The national requirements are practically satisfied by the domestic output, as only 27 metric tons were imported during 1925.

STARCH

There are eight factories in the Kingdom manufacturing starch from corn (maize). Seven of these factories are in the Voivodina and one in Dalmatia. Their total capacity is about 8,500 metric tons a year, and their actual production is about sufficient to supply the entire domestic consumption.

The entire consumption of starch in Austria-Hungary was supplied, in pre-war days, by the Voivodina factories. With the change of frontiers, the Budapest and Vienna markets were lost, so that now the output is far below the maximum capacity of the plants.

EXPLOSIVES

The Government operates two powder factories, one at Kamnik, Slovenia, and the other at Obilić. The entire output of these two plants is reserved for the needs of the army. In addition to these two State enterprises there is a private factory located at Mahično, near Karlovac, Croatia-Slavonia, which manufactures the explosive known as "Titanit" and which has a daily production of about 10 metric tons.

PAINTS AND VARNISHES

The manufacture of paints and varnishes is fairly well developed in the Kingdom. The principal factories are in Croatia-Slavonia and Slovenia, the largest and most modern being in Zagreb. Other large plants engaged in this production are located in Ljubljana and Hrastnik, Slovenia.

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[19] These figures are for operating seasons—not for calendar years—and are expressed in terms of pure alcohol.

The estimated annual production of paints is from 12,000 to 15,000 metric tons, of which a very large proportion is in the form of cold-water paints. Approximately 80 per cent of the domestic consumption is supplied by local factories. The great disproportion between the production of cold-water paints and oil paints is due to the fact that in decorating houses both the interior and exterior walls (these latter are ordinarily covered with cement or stucco) are tinted with cold-water paints requiring frequent renewal and only the woodwork is painted with oils. The use of oil paints in the industries is also exceedingly small. The paint bases (white lead, zinc white, and lithopone) are all produced within the Kingdom, but the domestic output is supplemented by imports. Pigments of the earth-color type, with the exception of ochre, are largely of local production, but the aniline dyes are nearly all imported. Most of the linseed oil and a considerable part of the turpentine used in oil paints come from abroad. Ready-prepared paints are used in fair quantities, but by far the greater part of the paints are mixed by the painter.

The annual domestic production of varnishes is estimated at from 2,000 to 2,500 metric tons. Only about 200 metric tons a year are imported. Spirit varnishes are also produced in the Kingdom, the annual output being placed at approximately 700 metric tons, which is about equal to the demand, as only 6 or 7 metric tons are annually imported.

SEED OILS

In South Serbia, poppy and sesame seed are pressed for oil in small workshops, while in the Voivodina, Croatia-Slavonia, and Slovenia there are a number of mills engaged in the extraction of oil from flax, rape, hemp, pumpkin and sunflower seeds. Although figures of production are not available, it is known that the output is not sufficient for domestic requirements and that about 6,500 metric tons of such oils are annually imported.

MINOR CHEMICAL INDUSTRIES

Since the war a number of concerns have started the production of pharmaceutical products. The center of this industry is in Zagreb and Karlovac, Croatia-Slavonia. Most of them specialize in the preparation of perfumes, cosmetics, and other products which require simple processes. Practically every large center has a shoe-paste factory which supplies the needs of the region. Only about 35 per cent of domestic requirements are met by imports.

TEXTILES

In addition to the weaving of hemp and of peasant linen there are mills in the country engaged in the manufacture of woolen fabrics, cotton goods, and silk.

WOOL

There are about fifteen woolen mills in the Kingdom having a grand total of about 40,000 spindles and 800 looms. The principal articles of production are yarn, braids, blankets, peasant cloth, and materials for the uniform of officers and soldiers. The daily output of these factories is about 6,500 meters of cloth. The peasant production is sufficient to supply all the blankets and uniforms for the army and

to satisfy the entire domestic demand for peasant cloth and the coarser grades of blankets.

None of these mills produces suitings, but the largest factory, which is at Paračin, Serbia, is now installing machinery for the weaving of gabardines, serges, and similar fabrics. This factory, which is equipped with 200 looms and employs 800 workmen, has a thoroughly modern installation dating only from 1921. Its electric energy is developed by two steam motors of 450 horsepower and 800 horsepower, respectively. Its actual daily output is 2,500 meters of carded fabrics, but the plant is being enlarged and by 1927 the workmen will number 1,200 and the production will reach 4,500 meters of cloth.

The coarser grades of wool employed are of domestic production and represent about 40 per cent of the total mill consumption. The longer and finer grades are imported, chiefly from South America and Australia. A small quantity of merino is obtained from Hungary. The mills expect within a few years to be able to satisfy the entire needs of the Kingdom for wool goods of all sorts.

COTTON

About 15 mills are engaged in the production of cotton goods. There are no definite statistics available, but it is estimated that the spindles number 150,000 and the looms 4,500. The total output is placed at 25,000,000 meters of cloth and 4,500 metric tons of yarn. Most of these mills are small, but there are three large ones, two of which are in Slovenia and one in Croatia-Slavonia. The Slovenian plants are at Litija and Terzich. The former is equipped with 480 looms and 33,000 spindles and has an annual production of 4,500,000 meters of cloth. The installation of the latter comprises 23,312 spindles and 613 looms. Its annual output amounts to 1,300 metric tons of cotton yarn and 5,000,000 meters of cloth. The Croatian plant, which is at Dugaresa, has 1,250 looms and 45,000 spindles and produces annually from 8,000,000 to 10,000,000 meters of cloth and 2,500 metric tons of yarn. Most of the mills run almost entirely on yarn imported from the United States and England.

SILK

Prior to 1914, the production of silk cocoons in South Serbia was important, totaling 3,384 metric tons annually, but the military operations on the Saloniki front during the war destroyed the mulberry trees to such an extent that the production of silk cocoons in South Serbia in 1920 was only 143 metric tons. Since then there has been a gradual recovery and in 1923 the output totaled 333 metric tons. During 1920 the growing of cocoons was started in the Voivodina and, by 1923, 223 metric tons of silk cocoons were produced in that Province. The production of silk cocoons in the entire country during 1923 totaled 693 metric tons.

The extension of the production of the silk cocoons to the Voivodina and the gradual recovery of South Serbia both promise well for the future development of this industry. In 1923, 563 metric tons of silk cocoons were converted into raw silk by domestic factories and 130 metric tons were exported.

The manufacture of raw silk is entirely in the hands of the State, which maintains factories at Pančevo, Nova Kanjiža, and Novi Sad. The daily capacity of these three factories is as follows: Novi Sad, 100 kilos of raw silk, 210 kilos of silk waste; Pančevo, 50 kilos of raw silk, 105 kilos of silk waste; Nova Kanjiža, 40 kilos of raw silk, 85 kilos of silk waste.

About 50 per cent of the raw silk is exported and the remainder is consumed locally in the production of ribbons, silk threads, and similar articles.

KNIT GOODS

There are a number of knitting plants which turn out stockings, gloves, caps, shawls, and similar products. The total production of stockings is between 250,000 and 300,000 pairs a year, but this is far below domestic needs and about 300 metric tons of hosiery are annually imported.

WEARING APPAREL

A considerable part of the output of the cotton and woolen mills is consumed in small plants engaged in the manufacture of hosiery, shirts, collars, underwear, and hats. There are no figures as to the production, but it is apparently sufficient to supply the needs of the Kingdom for the cheaper grades, as only the finer qualities are imported.

HATS

The production of woolen and felt hats is fairly important. The largest factories are at Vršac and Kula in the Voivodina, and Galdovo, near Sisak, Croatia-Slavonia. The output is sufficient to supply the needs of the lower and middle classes, but fine hats are practically all imported from abroad.

CARPETS

There are carpet factories at Sarajevo and Veliki Bečkerek. The latter is capable of producing 70 square meters of carpets daily.

JUTE

Jute bags are used in large quantities for the transportation of grain, beans, potatoes, cement, and other products of the Kingdom. Despite this fact there is only one factory in the Kingdom manufacturing such sacks. This factory, which was established in 1924, is located at Mladenovac, Serbia, and has at present an annual capacity of 6,000,000 bags.

During 1925 the imports of bags totaled 6,068 metric tons, which is equivalent to about 19,000,000 bags.

The raw material is imported at the present time, but the possibility of growing jute in South Serbia is being seriously considered.

PAPER

The paper industry produces cardboard, paper bags, cigarette paper, playing cards, and writing paper.

The total capacity of all the mills of the Kingdom is about 30,000 metric tons, the actual output is about 20,000 metric tons. These plants work exclusively for domestic consumption, but they have not yet been able to supply more than 50 per cent of the national requirements.

In 1925 the imports of all kinds of paper totaled 24,630 metric tons. The largest concern engaged in the manufacture of paper has its headquarters at Ljubljana and operates three mills at Medvode, Vevče, and Goričane, in Slovenia. The total annual capacity of these mills is 11,000 metric tons, while their daily production amounts to about 36 metric tons.

The Medvode factory has also a plant for the production of cellulose, the annual capacity of which is 1,900 metric tons. The second largest paper factory in the Kingdom is at Belgrade and is of postwar construction. Recently, however, litigation with the Government has resulted in a temporary cessation of work. The cigarette paper factory is at Sušak, Croatia-Slavonia, and has a capacity of 650 metric tons a year.

WOOD INDUSTRY

Aside from the production of lumber and other primary products, the wood industry consists mainly of the manufacture of veneer, staves, parquetry, and furniture.

VENEER AND CHAIR SEATS

There are four factories engaged in the production of veneer, three of which are in Croatia-Slavonia and one in Slovenia. The largest is at Brod, Croatia-Slavonia, and is equipped to produce about 5,000 metric tons annually. The total capacity of all four factories probably does not exceed 7,000 metric tons, while the actual output is probably about 2,000 metric tons a year, of which about 1,500 metric tons are for domestic consumption.

In 1925 the exports totaled 1,378 metric tons. Despite the fact that the production exceeds the domestic requirements, a small quantity of the finer grades which are not locally made must be imported. A large proportion of the veneer is in the form of chair seats.

STAVES

Staves are used in considerable quantities in the Kingdom in the manufacture of barrels, for cement, plum marmalade, plum brandy (slivovica), beer, wine, sauerkraut and pickles, fish, lard, cheese, and vegetables.

Spruce, fir, beech, and oak are all used for this purpose. As a rule, only oak staves are made for foreign markets. The domestic requirements are satisfied by the staves made in the small factories or by the peasants in the wooded regions.

There are no statistics as to the total capacity or production of this industry, but the actual output is more than sufficient to meet the domestic demand. There are factories of local importance in practically every section of the Kingdom, but the large plants which manufacture almost exclusively for export trade are in Croatia-Slavonia and Slovenia. The center of production is Vinkovci, where there are two large oak-stave mills. The total annual production of oak staves is estimated by exporters at about 9,000 metric tons, but this is considerably below the capacity of the factories. The exports during 1925 totaled 6,309 metric tons.

FURNITURE

The furniture industry is sufficiently large to supply the usual needs of the entire population, and only the finer qualities are imported from abroad for the use of the wealthy classes. Oak is the principal wood used for this purpose, although a considerable quantity of willow and wicker furniture is manufactured in the Voivodina. As a rule, furniture of domestic manufacture is massive and simple in style and construction and is rarely carved or decorated. In the country districts the homemade furniture of the peasants is frequently carved. The principal centers of this industry, which works entirely for national needs, are Zagreb and Subotica.

PARQUETRY

As parquet floors are usual in the homes of the upper and middle classes the production of parquetry is important. Practically every sawmill in the country makes this kind of material. The center of the industry is in Croatia-Slavonia and Bosnia. Oak is primarily employed for this purpose, but a certain amount of beech is also used. It is estimated that the capacity output of the Kingdom approaches 500,000 cubic meters annually. The production is sufficient to supply entirely the domestic requirements and to furnish a surplus for export. In 1925 the exports totaled 6,407 metric tons.

MISCELLANEOUS

A number of small plants manufacture canes, wooden utensils, and other simple articles of general consumption. Their output is equal to the domestic requirements.

CERAMICS

BRICKS AND TILES

Nearly all of the buildings of the Kingdom are constructed of bricks and roofed with tiles. These materials are supplied entirely by domestic plants which are located in practically every town of any importance in the country. The output depends entirely upon the amount of construction in a given year. There are no statistics or estimates as to the production of bricks, but the output of tiles is placed at about 150,000 metric tons in a normal year. Tiles are being replaced to a small extent as roofing material by an asbestos composition closely resembling slate which is manufactured under various trade names in Zemun, Maribor, Split, and Zagreb.

GLASS

There are three large glass factories in Slovenia (at Hrastnik, Zagorje, and Straža) all of which are under the same management. They employ about 700 workmen and have a joint capacity of 9,500 metric tons of hollow glass, of which about one-third is in the form of medicine vials and the remainder in the form of fruit jars and of bottles for beverages, condiments, and sauces. Flat glass is made by a factory at Daruvar, Croatia-Slavonia, which employs 200 workmen and is capable of producing 400,000 square meters annually.

Hollow glass and window panes are produced at the factories in Paračin and Zaječar, both of which are in Serbia. The annual capacity of the former is placed at 3,000 metric tons and of the latter at 6,000 metric tons.

In addition to these plants, nine large and seven small factories are engaged in the production of mirrors.

The output is far below capacity, and a considerable amount of glass is imported annually. In 1925, the imports were 9,031 metric tons.

METAL INDUSTRY

The metal industry, other than the treating of ores (which has been described in the section on mining and mining industries), is mainly limited to the production of simple articles of general consumption. A considerable proportion of such articles are made by the artisans in the larger towns and cities. However, there are a number of important factories transforming crude metal into simple finished products. The center of this metal industry is in the former Austro-Hungarian Provinces of Slovenia, Croatia-Slavonia, and Bosnia. The manufacture of scythes and locks is the most important branch of this industry. About 25 factories, of which 5 are in Slovenia and the remainder in Bosnia, make scythes, and 5 factories, all in Slovenia, are engaged in the production of locks. Bronze bells are cast in 10 foundries. Sixteen plants, of which 6 are comparatively large, produce wire in sufficient quantities to supply the domestic needs. A considerable portion of the requirements for farming implements is met by factories located in the former Austro-Hungarian Provinces.

Nails, screws, files, saws, small hardware, household articles, and cooking utensils are also manufactured in sufficient quantities to meet the normal demand within the Kingdom. Metal utensils are exported to some extent to neighboring countries. In 1925 such shipments abroad totaled 1,589 metric tons.

TANNING AND LEATHER INDUSTRY

The considerable number of livestock, as well as the large capacity of the tanning-extract factories, would indicate an important tanning and leather industry in the country. This, however, is not the case. In the first place, large numbers of livestock are exported, and, furthermore, in pre-war days, skins and hides produced in the former Austro-Hungarian Provinces were to a large extent shipped for treatment to Germany and to sections of the Dual Monarchy outside of the present territorial limits of this Kingdom, while, in Serbia, domestic hides and skins were either tanned in a primitive manner for the production of peasant footwear ("opankas") and of other simple articles of general consumption or else were exported in their raw state.

The tanning and leather industry of the country is geographically divided into two sections. In the former Austro-Hungarian Provinces, principally Slovenia, there is a small but fairly well-developed industry, while that in Serbia is of recent development.

The failure of the tanneries and leather factories to increase their production sufficiently to meet the domestic demand for such products is due entirely to the lack of capital for expansion.

PRODUCTION OF HIDES

Official statistics do not exist as to the number of hides or skins produced in the Kingdom, but a careful survey of the situation, taking into consideration the estimated amount of skins used by the peasantry, the exports, and the number of livestock, indicate the following figures for the annual production:

Horse	150, 000	Sheep	1, 250, 000
Cow	650, 000	Lamb	1, 750, 000
Calf	500, 000	Goat	400, 000
Pig	250, 000	Kid	650, 000

All skins and hides are sun-dried immediately after stripping.

TANNING

There are 54 tanneries in the Kingdom, of which 24 are large. The center of this industry is Croatia-Slavonia and Slovenia, the most important plants being at Karlovac, Zagreb, Ljubljana, Maribor, and Kranj. There is also a large tannery at Niš (Nish), in Serbia. Despite the fact that the domestic production of small skins is considerably greater than that of large hides, the tanning industry is not equipped to treat the small skins but is capable of handling the entire output of large domestic hides as well as a certain quantity of imported hides.

Shortly after the Great War an effort was made to develop in Croatia-Slavonia an industry for the treatment of small skins and for the manufacture of gloves and similar products, but this has not proved successful. A very large proportion of domestic skins and hides are tanned by peasants and artisans. The process is usually vegetable—barks, gallnuts, and sumac being much employed. The tanning materials in most general use in the tanneries are wood extracts, although chrome is sometimes used.

Horsehides.—With the exception of a small number of horses killed for food in the Moslem regions, the hides are drawn from animals that die from old age or malady. In damp years the production is greater because of the increase in disease. The tanning is usually oak or chestnut. Horsehides are employed in the making of inner soles and black chrome leather for uppers of cheap peasant shoes.

The manufacture of such leather in the former Austro-Hungarian Provinces is carried on by modern well-equipped factories and in the other sections of the country by small artisans who make "opankas," or peasant shoes. The majority of such hides, however, are exported, as the demand within the Kingdom is limited because of the general use, for shoe uppers, of domestic calf leather, which is extremely cheap.

Cowhides and calfskins.—Of the total estimated production of 650,000 cow hides, 400,000 are taken from animals killed in slaughterhouses and 250,000 from animals privately killed. These latter are primitively tanned and are largely used in the production of peasant shoes. Abattoir hides, as a rule, are treated in modern tanneries and then made into leather goods in organized factories. Normally, the hides are vegetable-tanned and only a small number are treated with chrome, as chrome leather of local production is considered inferior in quality to the foreign product. Small quantities of

quebracho and mimosa are also used in tanning, the former to increase the weight and the latter to give special color. First and second soles are made from the heavy hides, while uppers, which are largely used in the production of military shoes, are manufactured from light hides. A very large proportion of domestic sole leather and some traveling bags, saddlery, and harness are made from cowhides. The domestic output is not sufficient to meet local requirements, and the imports annually amount to 8,000 metric tons of raw hides and 1,500 metric tons of sole leather.

Calfskins are nearly always vegetable-tanned, the treatment requiring about six weeks. Small quantities of quebracho to give weight and mimosa to give color are employed. From calfskins are manufactured black box, tanned with chrome and usually of inferior quality; white calf and black calf, both of which are vegetable-tanned and of good quality; and patent leather. Shoe uppers absorb nearly the entire output of calf leather. A small amount is annually imported to supplement the domestic production.

Pigskins.—The domestic production of pigskins is small, as a very large number of live hogs are annually exported. The quantity of pigskins treated within the Kingdom is small, as the bulk of the output is exported. The tanning is invariably vegetable. The domestic consumption is largely utilized in the production of "opankas" by peasants and craftsmen. There is, however, a factory at Ljubljana engaged in the manufacture of saddlery from pigskins.

Sheepskins and goatskins.—With the exception of those skins prepared by the peasants and artisans, practically the entire output is exported. The consumption of sheepskins, however, in the form of peasant garments such as long overcoats, capes, and vests is very heavy. The exports of goat and sheep skins, which are invariably sun-dried and untanned, are listed together and annually total about 500,000 pieces. Peasants and artisans use sumac, bark, and gallnuts for tanning.

Lambskins and kid skins.—There are no important tanneries in the Kingdom treating lamb and kid skins, nor are there any large factories engaged in the manufacture of leather goods from such materials. Practically the entire output, after the deduction of those skins which are primitively tanned and utilized by the peasant classes for their own needs, is exported. The exports of lamb and kid skins, which form a single item in the statistics, total annually about 2,000,000 pieces.

Peasants invariably use a vegetable process in tanning. The domestic consumption is for peasant coats, vests, and caps.

LEATHER INDUSTRY

The leather industry which has developed in order to meet the demands of the population for footwear, saddlery, and harness is largely centered in Slovenia, although there are important factories in Zagreb, Belgrade, and other cities.

Footwear.—The "opankas" or sandals, used by the rural classes, are usually made by the peasants themselves or by shoemakers. Leather, simply tanned, is for the most part employed for this purpose, but in some of the mountain districts untanned skins are used. The annual consumption of opankas is generally estimated at 13,500,000 pairs, while that of shoes is placed at about 5,500,000 pairs.

The high import duty considerably restricts purchases abroad, with the result that the imports only total about 500,000 pairs a year. The domestic production supplies the other 5,000,000 pairs, of which 2,000,000 are made in factories, 1,000,000 in workshops, and 2,000,000 by individual shoemakers. The largest shoe factories in the Kingdom are at Belgrade, Tržić, Ljubljana, and Zagreb. The production of shoes and "opankas" is supplemented by that of heelless slippers which are commonly used by peasant women and servants and in the manufacture of which seven factories are engaged.

The consumption of shoes is undoubtedly limited by their high cost. Shoes are gradually replacing opankas and the production is expected to expand to meet this increased demand, as the capacity of the factories is considerably greater than their present output.

Other leather goods.—Among the other products manufactured in fairly large quantities are gaiters, saddlery, harness, straps, traveling bags, whips, and upholstery leather. The manufacture of gaiters (which is about equal to the national requirements) is done, as a rule, by the shoe factories, although there are several plants specializing in this line. The production of saddlery, harness, and whips is sufficient to satisfy the entire needs of the Kingdom. There are one or two fairly large plants manufacturing traveling bags and upholstery leather, but the total output is considerably below the domestic consumption.

Since the war, several concerns have started to make morocco leather, and one firm in Zagreb has installed modern equipment and employs about 60 workmen. Leather belting is made by two factories, one at Zagreb and one at Zemun, but the output is far from meeting the domestic requirements, the greater part of which are supplied from abroad. Glove making was undertaken by several leather manufacturers immediately after the armistice, but production has declined, as the financial returns were disappointing. At one time the annual output of one factory totaled 35,000 pairs.

Every factor seems to point to an early development of an exceedingly large leather industry in the Kingdom. The raw materials, including skins, hides, and tanning materials, exist in large quantities, and there is also a nucleus of skilled workmen. The domestic consumption is annually increasing and the import duty is protective. When capital becomes more readily obtainable at reasonable interest rates the leather industry may be expected to expand rapidly.

FOREIGN TRADE

The statistics of foreign trade of the Kingdom for each year from 1919 to 1926, inclusive, are shown below:

[In thousands; that is, 000 omitted]

Years	Exports		Imports		Trade balance	
	Dinars	Dollars	Dinars	Dollars	Dinars	Dollars
1919	686, 845	52, 033	2, 982, 067	225, 914	−2, 295, 222	−173, 881
1920	1, 320, 606	45, 226	3, 465, 919	118, 692	−2, 145, 213	−73, 466
1921	2, 460, 738	53, 308	4, 122, 098	89, 300	−1. 661, 360	−35, 991
1922	3, 691, 166	49, 373	6, 441, 876	86, 167	−2. 750, 710	−36, 794
1923	8, 048, 844	85, 927	8, 309, 635	88, 711	−260, 791	−2, 784
1924	9, 538, 774	120, 958	8, 221, 744	104, 257	+1, 317, 030	+16, 701
1925	8, 904, 539	151, 334	8, 752, 879	148, 757	+151, 660	+2, 577
1926	7, 818, 180	137, 600	7, 631, 779	134, 319	+186, 401	+3, 281

It is noted that during the first five years trade balances were adverse but during 1924, 1925, and 1926 the exports exceeded the imports.

After making due allowance for the increase of population between 1919 and 1925, it is found that the total foreign trade per capita was $23.73 in 1919 and $23.08 in 1925. Despite the fact that there was little change in the per capita value of the total foreign trade there was a very great shift in per capita exports and per capita imports between these two years, as is evident from the following table:

Years	Per capita foreign trade					
	Exports		Imports		Total	
	Dinars	Dollars	Dinars	Dollars	Dinars	Dollars
1919	57. 24	4. 90	248. 50	18. 83	305. 74	23. 73
1925	685. 00	11. 64	673. 30	11. 44	1, 358. 30	23. 08

EXPORTS

VOLUME AND VALUE

The volume and value of exports for each year since 1919 have been as follows:

Years	Metric tons	Value	
		Paper dinars	Dollars
1919	282, 679	686, 845, 040	52, 033, 712
1920	915, 186	1, 320, 606, 055	45, 226, 236
1921	1, 583, 658	2, 460, 737, 562	53, 308, 006
1922	2, 213, 881	3, 691, 166, 163	49, 373, 542
1923	3, 025, 914	8, 048, 843, 930	85, 927, 276
1924	3, 915, 700	9, 538, 774, 432	120, 958, 337
1925	4, 189, 634	8, 904, 539, 328	151, 334, 126
1926	4, 636, 213	7, 818, 180, 094	137, 600, 000

The statistics show a progressive increase in volume and dinar value of exports for the years 1919 to 1924, inclusive. This is natural in view of the fact that the close of the World War found the productive resources of the country disorganized, with the result that during the early years the exports were in no way a mirror of the productive capacity of the Kingdom. The steady decline of dinar exchange from 1919 through 1922 without a proportionate increase in domestic prices gave considerable impetus to the export trade, despite an uncertain economic and fiscal policy which adversely affected commerce. The dollar value of exports during these four years was fairly stable, because of the depreciation of the national currency, which offset the larger volume and greater dinar value of shipments abroad.

In 1923 the financial experiments with which the Government had attempted to stabilize the exchange, and which had seriously handicapped exports, were replaced by a well-defined, sound economic policy. As a consequence, dinar exchange improved and exports increased rapidly. During 1924, however, the dinar improved in value so rapidly that difficulties were experienced in marketing the exportable surplus. However, the large corn crop of 1924 coincided with a short crop abroad, so that the exports of this cereal increased to such an extent as more than to offset in 1925 the loss in volume and dollar value sustained by the other items. The dinar value was nevertheless smaller than that for 1924, owing to shrinkage in prices resulting from the improved exchange situation.

PARTICIPATION OF VARIOUS INDUSTRIES

The participation of the various basic industries in the export trade of the Kingdom is shown for each year since 1919 in the following table:

Classes	1919	1920	1921	1922	1923	1924	1925	1926
	Per cent	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*
Agricultural products	42.0	41.2	41.1	23.5	24.4	26.5	42.8	41.4
Animal products	28.3	14.2	40.3	42.1	38.6	31.2	22.1	26.7
Forestry products	2.8	23.6	8.0	17.2	20.0	20.4	16.0	13.9
Manufactures	7.9	6.5	4.0	6.3	5.4	5.7	4.5	5.1
Mineral products	.2	.9	3.7	8.9	9.4	7.6	6.0	5.7
Miscellaneous	18.8	13.6	2.9	2.0	2.2	8.6	8.6	7.2

The export trade is based essentially on agricultural products, animal and animal products, and forestry products, usually ranking in the statistics in the order named. In 1924 and 1925 agricultural products increased their participation in the export trade as a result of large harvests. The bumper corn crop of 1924 was alone responsible for the very high percentage of agricultural products in 1925.

In 1920 restrictive Government measures, promulgated in order to protect and reconstitute the herds, seriously affected the shipments of animals and animal products during that year.

The slump in the exports of forestry products during 1921 was due to the saturation of foreign lumber markets which resulted in smaller sales and a heavy drop in prices. In 1921 the exports of all forestry products were only 1 per cent less than in 1920, but their value was nearly 40 per cent less than those of the preceding year.

Agricultural products and animals and animal products now fairly well counterbalance each other, as, in years of large crops, livestock products are not exported in large quantities because sufficient stock food is available to increase and fatten the herds. In short-crop years, on the other hand, livestock constitutes a burden on the grain reserves of the peasants who consequently export animals in large numbers. Likewise, stock is fattened during periods succeeding large harvests and is slaughtered and exported in the form of meat and meat products when the agricultural output is low.

The leading articles of export, with their quantities and values during 1924, 1925, and 1926, were:

Articles	1924		1925		1926	
	Metric tons	Dinars	Metric tons	Dinars	Metric tons	Dinars
Construction wood	1, 046, 292	1, 620, 156, 622	1, 051, 225	1, 118, 720, 734	1, 086, 315	802, 577, 567
Corn	245, 146	585, 228, 850	1, 011, 273	2, 055, 661, 520	894, 716	1, 338, 652, 769
Eggs	20, 129	618, 561, 809	27, 225	608, 914, 528	31, 086	606, 297, 200
Wheat	172, 401	683, 579, 485	169, 958	501, 464, 626	297, 285	846, 093, 658
Beeves	[1] 168, 100	745, 323, 142	[1] 108, 890	413, 005, 050	126, 877	355, 315, 240
Crude copper	7, 605	346, 490, 091	7, 880	227, 743, 210	10, 759	250, 953, 633
Meat, fresh	11, 925	302, 511, 568	11, 984	225, 045, 297	21, 505	324, 025, 584
Flour	59, 075	343, 070, 273	37, 756	198, 678, 806	32, 820	156, 804, 680
Dried prunes	19, 940	179, 001, 595	34, 542	191, 025, 760	47, 184	233, 587, 939
Cement	341, 628	189, 421, 784	354, 423	173, 694, 635	320, 271	126, 387, 785
Hogs	[1] 86, 183	271, 364, 210	[1] 70, 266	123, 541, 375	297, 870	339, 314, 440
Horses and colts	[1] 56, 475	235, 053, 800	[1] 32, 907	122, 443, 160	36, 839	106, 883, 370

[1] Head.

These items constitute about 70 per cent of the total value of the exports. It will be noted that raw materials form the bulk of the shipments abroad.

COUNTRIES OF DESTINATION

The principal countries to which products of the Serbo-Croat-Slovene Kingdom are shipped are listed below, together with the percentage of their participation in this trade from 1920 to 1926, inclusive:

Countries of destination	1920	1921	1922	1923	1924	1925	1926
	Per cent	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*
Italy	26. 98	23. 43	28. 05	28. 66	28. 91	25. 26	25. 07
Austria	42. 67	35. 86	22. 97	28. 93	24. 46	18. 55	20. 59
Czechoslovakia	5. 12	4. 10	8. 11	7. 82	9. 89	9. 37	12. 01
Hungary	2. 14	1. 21	5. 24	4. 79	7. 93	5. 15	4. 74
Greece	4. 57	5. 19	4. 67	5. 74	7. 09	7. 40	7. 39
Switzerland	3. 68	6. 87	7. 62	6. 43	4. 08	4. 10	3. 79
Germany	7. 52	16. 15	8. 43	4. 22	4. 08	7. 15	9. 27
France	3. 13	1. 66	5. 85	4. 33	3. 80	2. 00	2. 41
Rumania	. 08	. 35	. 29	. 38	2. 65	13. 63	10. 00
United States	. 34	. 21	. 46	. 36	. 53	. 86	. 64

Austria and Italy have constantly disputed first place, but the latter country is now the leading customer. From 1919 through 1923 grain shipments were moved, for the most part, up the Danube and were distributed from Vienna. In 1924 there was a very large shift in grain shipments, which took their way down the Danube to Braila, Ru-

mania, for distribution. This is the largest factor in the loss of trade to Austria and in the increase of exports to Rumania. Austria in the early years following the war held high rank by virtue of habit, as Vienna had always been the trade center for the Voivodina, Croatia-Slavonia, and the other southern Provinces.

Other markets have now been gained, and trade with Austria is gradually receding. Italy, which is dependent in a large measure upon imports for its food and other raw materials, is both geographically and economically the natural market for the products of its nearest eastern neighbor, and it is not surprising that it ranks first.

Exchange and other constantly changing factors have caused fluctuation in the destination of exports, but the deflection of grain shipments from Vienna to Braila is the one outstanding feature of the export trade.

The principal products shipped to the leading export markets of the Kingdom are:

To Italy.—Lumber, grain, livestock, meat and meat products.
To Czechoslovakia.—Grain, industrial and medicinal plants, livestock, milling products.
To Austria.—Grain, livestock, meat and meat products.
To Hungary.—Grain, lumber, hemp, flax and other similar products, ores, cinders, etc.
To Greece.—Livestock, lumber, grain, vegetables.
To Switzerland.—Eggs, lumber, grain, meat and meat products.
To Germany.—Eggs, copper and alloys, fruit, hides, feathers, raw wool, cocoons.
To France.—Copper and alloys, lumber, raw wool, hides, feathers, cocoons, ether and alcohol, ethereal oils for cosmetics, and the like.
To Rumania.—Grain, milling products, vegetables, copper and alloys.
To the United States.—Shipments to the United States have never exceeded 0.86 per cent of the total value of exports.

A glance at the list of the leading exports fully explains the small amount of goods going to America. The declared exports during 1925 were valued at $1,750,293. The principal items were: [19]

Dried beet pulp	$320, 260	Cellulose	$144, 229
Copper, crude	312, 997	Calcium cyanamide	106, 779
Bauxite	210, 923	Pyrethrum flowers	60, 120
Skins and hides	186, 744		

The value of the declared exports to the United States, as reported by American consuls, decreased to $1,260,907 in 1926 and to $1,148,363 in 1927. In this last year the leading items were:

Wood	$244, 779	Pyrethrum flowers	$99, 307
Hides and skins	166, 610	Maraschino (fruits and sirup)	77, 789
Chemical wood pulp	144, 924	Bauxite	50, 645
Textile products (chiefly unformed felt hats)	100, 222	Bone meal	48, 098
		Beet pulp	41, 712

The United States is taking increasing amounts of spruce wood and chemical wood pulp for paper making, as well as larger quantities of oak and beech for railway ties and walnut for fine furniture.

[19] Complete statistics of exports by commodities are given in the Appendix.

IMPORTS

VOLUME AND VALUE

The volume and value of imports for each year since 1919 have been as follows:

Years	Metric tons	Value	
		Paper dinars	Dollars
1919	155,170	2,982,067,276	225,914,225
1920	439,563	3,465,819,272	118,692,440
1921	733,638	4,122,097,642	89,300,208
1922	1,232,414	6,441,876,189	86,167,418
1923	1,123,019	8,309,635,472	88,711,812
1924	1,127,686	8,221,743,552	104,257,463
1925	1,513,862	8,752,878,739	148,757,114
1926	1,241,055	7,631,779,276	134,319,315

From 1919 through 1922, imports were naturally heavy because the end of the war found the country largely depleted of the usual necessities of life. During this period such articles, largely textiles, had to be purchased abroad, as the productive forces of the Kingdom were not sufficiently organized to supply even the most pressing needs of the population, other than for foodstuffs. Fortunately, the harvests in 1919 and subsequent years were large enough to meet at least national requirements. By 1923 the reorganization of the country had advanced to such a point that for a large number of items domestic production was sufficient not only to satisfy the domestic demand but to furnish an appreciable surplus for export. Consequently, in 1923, the exports were almost equal to imports, and in 1924, 1925, and 1926 there was an export surplus.

By 1923, therefore, the extraordinary demands, which were the natural outcome of war conditions, were satisfied, and since then there has been a steadily expanding demand for a wider range of articles to meet the rising standard of living. The slight shrinkage in dinar value of imports during 1924 was the corollary of the improvement in exchange.

CLASSES OF MERCHANDISE COMPOSING IMPORT TRADE

The following table shows, by percentage, the participation of the various classes of merchandise in the import trade for each year since 1919:

Classes	1919	1920	1921	1922	1923	1924	1925	1926
	Per cent	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*
Textiles	79.7	49.2	42.6	37.0	42.7	40.0	37.9	36.3
Miscellaneous	6.1	15.3	17.3	18.7	16.7	18.0	18.0	20.0
Foodstuffs	4.1	8.5	11.9	13.5	12.1	14.8	13.5	11.0
Metals and metal products	3.5	8.5	11.5	13.0	12.2	11.1	11.2	11.7
Machines and apparatus	.8	2.3	5.7	6.2	5.6	5.3	5.9	6.7
Chemicals	4.5	7.3	4.2	4.4	3.6	3.5	5.1	5.7
Colonial goods	.7	1.5	1.8	2.5	3.3	3.4	3.6	3.6
Mineral oils	.5	7.2	4.7	4.0	3.2	3.2	3.4	3.7
Automotive vehicles	.1	.2	.3	.6	.6	.7	1.4	1.3

This table shows the restriction of imports to articles of prime necessity, principally textiles, in 1919 and the gradual expansion of

foreign purchases to satisfy the constantly rising standard of living, as is evidenced by the progressive increase in the percentage of automotive vehicles.

COUNTRIES OF ORIGIN

The principal countries from which imports come are listed below, with the percentage of their participation from 1920 to 1926, inclusive:

Imported from—	1920	1921	1922	1923	1924	1925	1926
	Per cent	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*
Italy	36. 59	20. 74	15. 30	17. 69	20. 52	18. 78	13. 82
Austria	20. 60	28. 74	28. 29	26. 94	19. 77	18. 33	20. 08
Czechoslovakia	9. 28	20. 44	19. 84	18. 51	20. 07	17. 81	18. 70
England	7. 05	5. 97	7. 12	9. 91	10. 63	8. 15	5. 75
Germany	1. 45	4. 23	7. 17	8. 71	8. 30	9. 90	12. 03
Hungary	0. 40	0. 99	2. 63	1. 69	2. 90	5. 03	4. 65
France	3. 82	4. 56	3. 04	3. 25	3. 36	3. 69	4. 63
Greece	9. 11	5. 89	2. 82	2. 04	3. 23	2. 98	1. 94
Rumania	3. 82	1. 86	3. 78	2. 55	2. 23	3. 61	4. 35
United States	2. 37	2. 40	3. 50	3. 69	3. 90	3. 90	4. 05

As in the case of exports, Italy and Austria have, since the beginning, contested for first place in the Serbo-Croat-Slovene market. Notwithstanding the long-established custom of the peoples south of the Drave and the Danube to regard Vienna as their chief source of supply, Italy at first outranked Austria as a result of the economic exhaustion of the latter immediately following the war. By 1921, Austria gained the ascendancy and held it until 1924, when Italy, closely pressed by Czechoslovakia, once more secured first position. This shift was natural, as both Czechoslovakia and Italy manufacture the articles most needed in the triune Kingdom, while Austria serves largely as a distributing center, for the Balkans, of goods of non-Austrian origin. As the economic and commercial policy of the Belgrade Government is to eliminate intermediaries in the foreign trade of the country, it is probable that Vienna's prewar position as the chief source of imports for the regions now forming the Kingdom of the Serbs, Croats, and Slovenes has been definitely lost.

The leading imports from the principal countries of origin are:

From Italy.—Cotton goods, flour, wool, and rice.
From Austria.—Cotton goods, woolens, paper, and manufactures of iron.
From Czechoslovakia.—Cotton goods, woolens, flax, and hemp thread.
From England.—Colonial goods and cotton goods.
From Germany.—Cotton goods, woolens, manufactures of iron.
From Hungary.—Wheat, flour, cotton goods, manufactures of iron.
From France.—Woolens, cotton goods, silks, and manufactures of iron.
From the United States.—The United States ranked ninth during 1926, with 4.05 per cent, representing a total value of $5,439,930. American trade is increasing, and it seems certain that it will furnish annually a larger proportion of the imports.

The imports from the United States during 1925 were:[20]

	Dinars		Dinars
Mineral oils	67, 684, 592	Coffee	16, 243, 081
Automotive vehicles	48, 553, 681	Flour	15, 643, 776
Hides, dry, salted, raw	44, 678, 675	Miscellaneous	74, 866, 970
Raw cotton	28, 694, 783		
Cereals	24, 803, 883	Total in dinars	341, 512, 707
Machines and machinery	20, 343, 266	Total in dollars	$5, 808, 040

[20] Complete statistics of imports by commodities for the years 1924, 1925, and 1926 are given in the Appendix.

REGULATIONS AFFECTING BUSINESS ENTERPRISES

JOINT STOCK COMPANIES

PRELIMINARY ORGANIZATION

The organization and operation of joint stock companies is placed under the control of the Ministry of Commerce and Industry. Those companies which are incorporated in the Kingdom are considered domestic concerns irrespective of the nationality of the directors or shareholders. To form such a company it is necessary that at least 10 persons unite for that purpose and that each furnish an equal share of the founding capital, the minimum being 10 shares for each person. Once this preliminary step has been taken, the founders must apply to the Ministry of Commerce and Industry for permission to organize the company. This application must be accompanied (1) by proof that they are legally capable of managing and disposing of their property; (2) by proof that each holds at least 10 shares of the founding stock; (3) by two copies of the proposed statutes, indicating:

(*a*) The object of the company, its name and place of business, and the proposed duration of the new organization.

(*b*) The amount of the joint stock capital, the number of shares, the face value of the shares, whether they are to be nominal or to bearer, and what changes can be made in that respect. If there are shares issued both as nominal and to bearer, then the respective proportion of each must be indicated.

(*c*) The manner in which the shares shall be paid in and the consequences following non-payment thereof.

(*d*) The sphere of the company's activities.

(*e*) The rights and the obligations of the shareholders.

(*f*) The manner in which members of the administrative and supervising committee shall be elected and substituted, with a statement of their rights and responsibilities, the methods of the supervision of the work, and of the appointment of employees.

(*g*) The number of members of the administrative and supervising committees.

(*h*) When and in what manner the regular and extraordinary meetings of the stockholders are to be called, as well as the conditions governing the right of stockholders to vote and in what manner this voting is to be performed.

(*i*) Which proposals to require more than a simple majority vote.

(*j*) Who shall represent the company in its relation with other persons and authorities, and which and how many signatures shall be binding for the company.

(*k*) In what manner the balance sheets are to be made and checked and in what manner the net profit is to be divided and checked.

(*l*) Under what conditions and how the company may cease operations and the method of liquidation.

(*m*) Any special benefit granted to any shareholder or to any other person.

(*n*) In case payment for shares is made in values other than money, the exact value of such property or investment and the number of shares or the prices corresponding to the property, as well as the name of the owner.

(*o*) The number of shares and the face value of the preferred stock which may be issued during the activities of the company, the rate of interest to be paid, and the manner in which these shares are to be withdrawn, as well as the preferred right acquired by the owners of such stock.

Other provisions considered desirable by the company may be stipulated if not contrary to law.

The Minister of Commerce and Industry has full authority to grant the permission to organize a stock company and to approve its stat-

utes if he finds that the activities of the proposed company will not be contrary to the existing laws or to the interests of the country and if the founders are persons of good business reputation. There are no legal requirements governing the nationality of the directors or the shareholders, and, under the law, all the directors and all the shareholders may be foreigners. However, the Minister of Commerce and Industry has full authority to withhold authorization for incorporation if he considers that, for any reason, the formation of a corporation will be inimical to the interests of the country.

Founders can not transfer their interests to other persons. If they are unable to complete within one year the organization of the company for which they hold the necessary permit, this permit automatically expires. After the approval of the statutes by the Ministry of Commerce and Industry they must be published by the founders before any call for stock subscription may be issued. Each subscriber must pay in at least 5 per cent of the face value of each share subscribed. Immediately following such subscriptions, the founders are obliged to issue a call through the Official Journal for a preliminary meeting of the subscribers, which must be held within two months after the capital stock has been fully paid up. Founders are responsible to the extent of their entire property for funds received from subscriptions. In order that binding decisions may be taken at this preliminary meeting a quorum of not less than 10 stockholders, whose total shares represent more than 50 per cent of the total capital, must be present in person or by proxy. Each share counts as one vote, but no individual may have more than 10 votes. The meeting will decide whether the statutes of the company are acceptable with or without amendments and may elect members of the administrative and supervising committees. Any amendments to the statutes must be approved by the Minister of Commerce and Industry before any further steps can be taken.

INCORPORATION AND REGISTRATION

After these requirements are fulfilled the administrative committee may call for the first installment of the subscription stock, which must be more than 10 per cent of the face value of every share, including the amounts already paid at the time of the original subscription. Within 15 days after the first installment is paid the administrative committee is required to register the name of the company in the commercial section of the court having jurisdiction over its place of business. The court shall announce this registration in the Official Journal. The application for registration must be signed by all of the members of the administration of the company as well as by those officials who are authorized by the statutes to sign for the company.

As soon as the court registers the name of the company, the board of directors is required to publish in the Official Journal an extract of the statutes of the company.

If the company has representatives or branch offices in other places of the Kingdom, such representatives or branch offices must register their business with the competent court of the place.

A joint stock company begins to exist legally only from the date of publication of its name by the court, and any shares floated before this publication have no legal value.

TRANSFER OF STOCK

The transfer of nominal shares is effected by an endorsement. Each joint stock company is obliged to keep a register of shareholders, showing the name, place of residence, and occupation of the subscribers and any change of ownership of the nominal shares. Such companies are not permitted to purchase their own shares or make loans against them, nor can they sell them below their face value. However, if a company desires to reduce its capital stock, it may be authorized to purchase its own shares, but these must be canceled and preserved in the files.

MANAGEMENT

The management of such companies is in the hands of a board of directors who are under the supervision, control, and inspection of a supervising board. The board of directors must be composed of not less than three stockholders who are elected in accordance with the provisions of the statutes. The board of directors represents the company in all dealings, and the members are personally and jointly responsible to the extent of their entire property for all damages resulting from any illegal or improper performance of their duties. The supervising board has full authority to supervise the entire work of the board of directors, to inform itself at any time of the work and status of the company, and the members of this board are required to report their findings to the general assembly of the stockholders, which can not decide on the division of the net profits, nor approve the balance sheet before having received this report. The members of the board of directors can not be appointed members of the supervising board.

GOVERNMENT CONTROL

The Minister of Commerce and Industry has the right, which is invariably exercised, of sending a representative to the general assembly of stockholders at which the annual balance sheet is read. In the event that the balance sheets indicate any irregularities, the Minister is authorized to have a full investigation made of the books of the company.

RIGHTS AND LIABILITIES

The responsibility of joint stock companies extends to the entire amount of their property, but the responsibility of stockholders does not extend beyond the amount of their shares. The members of the board of directors and of the supervisory Board are jointly and individually responsible to the company to the extent of their entire property.

All shareholders participate in the assets of the company proportionately to the amount of their holdings.

RESERVE FUND

Every joint stock company is legally obliged to constitute a reserve fund which shall serve to cover any of its losses. This fund is to be drawn from the sources prescribed in the company's statutes, and must be invested in bonds of the Government of the Kingdom of the Serbs, Croats, and Slovenes or in any stable domestic securities yielding a steady income. The statutes invariably specify that a definite percentage of the net profits of the company is to be set

aside for this purpose. The law does not fix the amount of this percentage, but the policy of the Ministry of Commerce and Industry is to require a minimum of 5 per cent. There is neither a maximum nor a minimum limit fixed by law for the total amount of the reserve fund, but as a rule this specified percentage of net profits is annually placed in reserve fund until it attains a minimum of 50 per cent of the paid-up capital.

CESSATION OF OPERATIONS

A joint stock company ceases to function—

(1) When its concession expires.
(2) When so decided by the general meeting of the stockholders.
(3) When the Minister of Commerce and Industry, upon ascertaining that 50 per cent of the capital has been lost and that there is no reasonable hope of its recovery, in his discretion orders its dissolution.
(4) When the company becomes bankrupt.
(5) When the company merges with another stock company.
(6) When the number of the stockholders falls below 10.

REGISTRATION OF FOREIGN JOINT STOCK COMPANIES

Foreign joint stock companies desiring to open branch offices under their own name are required to submit for approval to the Ministry of Commerce and Industry their program of work and their statutes.

With the application for registration the branch office or representative must submit to the Ministry of Commerce and Industry the following:

(1) Certificate showing that the company has been duly organized under the laws of the State and that it has actually started its business.
(2) That it has organized a branch office or agency domiciled in the Kingdom.
(3) An affidavit showing that the company agrees to act in accordance with the law governing the activities of joint stock companies and that all the legal acts of its agency or branch office in the Kingdom shall be binding for the company.
(4) That the branch office or agency is duly authorized to sign the company's name.
(5) Affidavit showing that the company accepts the jurisdiction of the courts and laws of the Kingdom in all matters and litigation arising from business done in the Kingdom of the Serbs, Croats, and Slovenes.

In addition to this, the company is required to show the amount of capital to be invested in the business.

In the event that there are no treaties with these States governing the reciprocity of the registration and functioning of joint stock companies, a company desiring to organize in the Kingdom is required to submit proofs showing in what manner the State where the company is organized treats joint stock companies organized in the triune Kingdom. If a company desires to open several branches, each branch must register with the court having jurisdiction over the place of business.

Foreign joint stock companies must keep their books in the Serbo-Croatian language, and in dinar currency. The general balance sheet, as well as a statement of the work done, must be published at least three times in the Official Journal. A foreign company is always held responsible for any damages caused by its representatives, as well as for all the work of its branch offices. All decisions of a foreign company concerning changes or modifications in the work of the company or concerning liquidation or merging with other companies

which are brought about in accordance with the laws of the country of origin of such a company and not contrary to the provisions of the laws in the Kingdom must be submitted to the Ministry of Commerce and Industry by the representative and be published in the Official Journal. All such decisions are binding upon the company after approval by the Ministry of Commerce and Industry.

CESSATION OF OPERATIONS OF FOREIGN JOINT STOCK COMPANIES

A foreign joint stock company may be closed when it is shown—

(1) That the company was closed in the State where it was originally organized, or that it has lost its rights to administer its property.
(2) That it has not been registered in accordance with the law; or that some of its branches have failed to register with the local courts; or that their books are not kept in the Serbo-Croatian language and in dinar currency.
(3) That the foreign State, where the company is domiciled, has abandoned the principle of reciprocity toward the companies organized in the Kingdom of the Serbs, Croats, and Slovenes.
(4) That decisions brought against the company or its branch offices and agencies in the Kingdom can not be carried into effect.
(5) That the capital brought for work in the Kingdom has been reduced or lost.

Liquidation of foreign companies organized in the Kingdom may be effected only in the Kingdom and in accordance with the laws thereof.

It is the policy of the Ministry of Commerce and Industry to require that a majority of the shares of a joint company be held by subjects of the Kingdom, although there are no legal requirements to this effect.

It is important that American concerns desiring to open a branch office in the Kingdom submit with their applications a duly legalized statement that the State in which the company is incorporated permits foreign companies to organize and function under the same conditions as domestic companies. In general foreign companies are subject to the same laws and terms as domestic companies in the Kingdom of the Serbs, Croats, and Slovenes.

PARTNERSHIPS

There are three kinds of partnerships—public, mixed, and anonymous, the last being identical with joint stock companies. A public partnership is one in which all of the partners figure publicly in the affairs of the firm. The partnership must be registered in the court, and all the names of the partners must be declared. The approval of the local Chamber of Commerce is a necessary prerequisite to registration in the court. All the members of the firm are individually and jointly responsible to the extent of their entire property for the liabilities of the firm on the principle of "one for all and all for one." Every partnership must be based on a written contract, of which there must be as many copies as there are partners, but it is not necessary that this contract be registered in the court. Such a contract can not relieve any of the partners of their responsibility for the firm's liabilities, but it may regulate the distribution of the profits.

Mixed partnerships are formed of public and silent partners. The responsibility of public partners in such a firm is identical to that of public partners in a public partnership. Silent partners, however,

can not participate in the activities of the firm in any way, and they are not responsible for the liabilities of the firm beyond the amount of their investments. They can not even be appointed as attorneys or representatives of such firms, nor can they take legal action as creditors against a firm in which they are silent partners. There may also be transient partnerships, public or mixed, organized for a specific business and ceasing to function after the completion of the transaction. Foreign partnerships are subject to the same requirements as domestic ones, with the sole exception that the previous approval by the Minister of Commerce and Industry of their application for registration may be required.

REGISTRATION OF INDIVIDUALS

The registration of individuals engaged in business enterprises must be made with the court having jurisdiction over their places of business. In order to secure such registration it is necessary that the application be approved by the local Chamber of Commerce. With the application must be submitted proof that the applicant is of legal age and of good moral and commercial standing and that he is legally capable of acquiring and disposing of property and of making a legal contract.

TAXATION OF BUSINESS ENTERPRISES

The taxation of business enterprises varies in the several Provinces. The entire tax system has already been fully described in this volume. The taxes for foreign concerns are identical with those for domestic firms.

The fees which the various forms of business enterprises have to pay are as follows:

Joint stock companies, when organized in the Kingdom of the Serbs, Croats, and Slovenes, are required to pay to the State Treasury a tax of 4 per cent of the face value of all shares issued to bearer, while nominal shares are taxed 2 per cent with the payment of 1 per cent for each assignment.

Foreign companies, under the present policy of the Ministry of Commerce and Industry, are required, when registering a branch office in the Kingdom, to pay a capitalization tax of 4 per cent on an assumed capital of at least 10,000,000 dinars, in the case of a banking institution, or of 5,000,000 dinars in the case of an industrial or commercial concern. Joint stock companies are also assessed a tax of 1 per 1,000 on their capital. These charges are paid only once, at the time of registration or incorporation.

Fees for registration in the court are as follows:

	Dinars
Joint stock companies	3,000
Foreign banking institutions	4,000
Pawn brokers	5,000
Export agencies	1,000
Import agencies	1,500
Export and import agencies	2,000
Mercantile firms (individual or partnerships)	500

In addition to this registration fee, a firm engaged in one class of business is obliged to pay the chamber of commerce a fixed charge of

400 dinars; if engaged in two classes of business, 600 dinars for both; and if engaged in more than two classes of business, 250 dinars for each additional class.

BANKS AND BANKING

REQUIREMENTS FOR ORGANIZATION

There are no special laws or regulations governing the organization or operation of banks. They are subject to exactly the same legal requirements and formalities as any other commercial enterprise. They may be joint stock companies, partnerships, or individually owned, though, as a matter of practice, banks are usually joint stock companies, as the liabilities of such concerns are limited to the amount of their assets, while the liabilities of partnerships and individuals extend to the entire property of the partners or owners, as the case may be.

RESERVE

No reserve is required by law for banks which are operating as partnerships or individually owned concerns, but banks which are joint stock companies must maintain a reserve in the manner and to the extent specified in their statutes. No legal provisions regulate the amount of this reserve, nor the sources from which it is to be drawn. Actually the reserve is generally constituted by setting aside a percentage, usually 5 per cent of the net profits. A survey of the statutes of the principal banks indicates that the reserve is, as a rule, maintained at an amount equal to 50 per cent of the paid-up capital, but there are no legal stipulations to this effect.

GOVERNMENT CONTROL AND INSPECTION

There is no service of inspection maintained by the Government, and the only form of State control over the operations of banks applies to joint stock companies and consists of the right of the Minister of Commerce and Industry (which is invariably exercised) to have a representative present at the general assembly of the stockholders at which the annual balance sheet is read. In the event that any irregularities are disclosed at this assembly, the Minister of Commerce and Industry may cause a full investigation of the books of the company to be made. No such control exists for banks operating as partnerships or under individual ownership. However, as a result of the authority conferred upon the Minister of Finance to control the traffic in foreign exchange and commercial paper, he is empowered to inspect the exchange transactions of every bank, but this is a special and temporary right and such inspections are limited to exchange operations. For this purpose, each bank is required to maintain a separate ledger containing all entries relating to the traffic in foreign exchange and commercial paper. A certified transcript of this ledger is periodically furnished to the Ministry of Finance, thus obviating the necessity of personal inspection, which is extremely rare.

TAXATION

The taxation incident upon banking institutions is identical to that falling upon commercial concerns. However, in the larger cities the incorporation tax is paid on an assumed capital of 10,000,000 dinars. This is not a legal provision but is in pursuance of the

policy of the Ministry of Commerce and Industry to discourage the formation of banks with capital insufficient to meet the needs of the community.

BANKING PRACTICES AND FUNCTIONS

About 85 per cent of the population belongs to the peasant class, which has an instinctive distrust of banks as a place of deposit for money, and that feeling has been greatly accentuated, in this country, by the long period of Turkish domination. It is conservatively estimated that about 2,000,000,000 dinars, or approximately one-third of the banknotes in circulation are withheld from productive channels by the peasants. This condition considerably reduces the amount of money available for investments. Furthermore, as not more than 5 per cent of all payments are effected by checks, banks would be required to maintain an unusually large cash reserve, were it not for the fact that they have recourse to deferring payments in order to secure a certain elasticity in the utilization of their credits. This practice is generally accepted and enables the banks to employ a fairly large proportion of their deposits for investment. Banks require a notice of six days for the withdrawal of small accounts not subject to check and proportionately longer notices in case of larger accounts, though such a requirement for small accounts is not usually enforced.

Banking institutions in the Kingdom are usually organized as industrial or trade banks, and as such actually operate industrial plants and engage in foreign trade. The larger part of their profits are derived from such activities and from transactions in foreign exchange. The granting of credits and the discount of notes are of secondary importance.

FINANCIAL CONDITIONS AFFECTING BANKING

Immediately following the armistice there was an urgent demand for all kinds of goods, as the country had been depleted of the ordinary necessities of life during the war. The importation of goods to meet this need resulted in enormous profits. The decline in local exchange and the consequent fall in the purchasing power of the dinar induced the possessors of liquid capital to look for some form of investment which would conserve the value of their holdings. Increasing property values and steadily rising rents tempted them to invest in building enterprises. The requirement of the Government that banks construct their own edifices added impetus to this move. Under these circumstances, it is not surprising that the erection of new buildings in Belgrade and Zagreb between 1920 and 1923 was so great that these two centers probably led all other European cities in this respect. This great building activity inevitably brought with it very decided increases in the cost of labor and materials.

Consequently, the original estimates had to be increased and additional capital found to complete the undertakings. The natural result was that by August, 1922, money became exceedingly tight and interest rates rose to 30 per cent or more. In 1923 and 1924, the State Mortgage Bank secured two loans, of 5,000,000 and 15,000,000 Swiss francs, respectively, which, while easing the money stress to a certain extent, were not sufficient to meet all the claims for credits to complete the buildings already under construction. The banks, as a result of the heavy demands for such credits, then entered into a period

of partial and deferred payments but continued to make, for building purposes, such advances as were necessary to protect their original investments in the hope that the rental returns would soon relieve the strain. Unfortunately, the rents from the new buildings did not at once alleviate the money stringency and banks found it difficult to face many of the ordinary demands, because their assets (usually considerably in excess of their liabilities) were not readily convertible. Despite these adverse conditions, they were able, as a rule, to withstand the strain by reducing the amount of credits granted and, in this way, obliging commercial enterprises to curtail their operations. In 1925, bank holdings so increased that large sums were available for investment, but these were advanced only on short-term credits, as the period of money stringency had made bankers wary of long-term credits. Interest rates declined to about 18 per cent. Since 1925, there has been a crisis resulting from the improvement in exchange which has rendered the cost of living exceedingly high, as the purchasing power of the dinar is lower within the Kingdom than abroad, reversing the conditions which had obtained previously.

The period of the greatest money demand runs from August to December, because of the need of credits to move the crops and to finance exports.

INTEREST RATES

Interest rates on loans since 1925 have ranged between 15 and 18 per cent.

ABSENCE OF AMERICAN BANKS

There are no American banks in the Kingdom, but all of the important banking institutions have connections with American banks.

CONSOLIDATION OF BANKS

The expansion of banking business is inevitably resulting in the consolidation of a number of banks, as the combined resources of two or more banks means not only increased prestige but a better utilization of their assets.

BANKING STATISTICS

Banking statistics for 1924 comprised data from 624 banks out of the total of 651 banks in the Kingdom. The National Bank, the State Mortgage Bank, and the Postal Savings Bank are not included in either figure.

The combined reports of these 624 banks showed the following totals for the entire Kingdom:

	Dinars
Paid-up capital	1, 912, 000, 000
Reserve funds (legal)	359, 000, 000
Other reserves	131, 000, 000
Deposits:	
Savings	2, 933, 600, 000
Current account	1, 705, 400, 000
Revenue:	
Gross	1, 235, 700, 000
Net [21]	300, 000, 000
Dividends	182, 000, 000
Losses [22]	22, 000, 000

[21] For all banks showing profits.

[22] For all banks showing losses.

INSURANCE COMPANIES

Insurance companies in the Kingdom are invariably organized as joint stock companies and are consequently subject to all the laws and regulations relating to joint stock companies. In addition to these general requirements all insurance business is under the supervision of the Minister of Commerce and Industry, to whom periodical reports must be made. Insurance companies must fulfill the following requirements in order to be able to operate within the Kingdom:

(1) Deposit a guaranty in the State Mortgage Bank (Državna Hipotekarna Banka) in the sum of 300,000 dinars for each class of insurance (fire, life, transportation, etc.). The total of such guaranty can never be less than 600,000 dinars.

(2) Acquire unencumbered real estate to the value of at least 200,000 gold dinars (200,000 Swiss francs).

(3) Cede to domestic companies at least 20 per cent of all reinsurance during the first five years and at least 50 per cent thereafter.

(4) Inform the Ministry of Commerce and Industry of all policies not reinsured.

Fifty per cent of the net income of premiums may be exported in the form of currency or of State obligations or of obligations guaranteed by the State.

In 1922 a law was passed authorizing the Ministry of Commerce to liquidate the affairs of insurance companies previously operating in the various sections of the Kingdom under the laws of Serbia, Hungary, or Austria.

Requirements for permits for foreign insurance companies to operate in the Kingdom are identical for all kinds of insurance.

The majority of the insurance sold in the country by foreign companies is handled by those foreign concerns which have nationalized their organizations and which operate as domestic companies.

TAXES

One-half of the payments made for policies collected by the holders may be charged to losses, but the other half is subject to taxation. Foreign and domestic insurance companies are subject to the same taxes. The rates are the same irrespective of the nature of the insurance handled.

COMPANIES OPERATING IN THE KINGDOM

There are 19 insurance companies operating in the Kingdom, of which 15 are domestic and four foreign. All of them are members of the national Society of Insurance Companies and insure and reinsure in accordance with the State regulations and decisions of the managing board of that society.

FOREIGN CAPITAL

The country needs the participation of foreign capital in the development of its natural resources in order to obtain a rapid expansion of its industrial potentialities. The immediate need for foreign capital is for the extension of the means of communication in order to tap the regions rich in natural resources such as mineral deposits and forest areas, as well as for the reclamation of agricultural lands. Once transportation facilities have been developed so as to furnish a ready means of distribution within the Kingdom, capital will be required for the development of the mining, forestry, and water-power resources of the country. Subsequently the transformation of raw materials to semifinished and finished products will also require financing. As it is certain that these threefold programs can not be financed by domestic means, there is a large field in this country for the use of foreign capital.

Capital is also required by the municipalities and Provinces for the construction of public works and for civic development. The amount of foreign capital invested in the Kingdom has never been officially computed or seriously estimated. It is known that a considerable portion of the industries of the former Austro-Hungarian Provinces were developed by German and Austrian capital. As an example of this may be cited the forest industries, where 50 per cent of the capital is said to be foreign. The large hydroelectric plant at Fala was erected by Swiss capital, while those of Dugi Rat and Sibenik are both Italian enterprises. The Bor copper mines are owned and operated by a French company. English capital is engaged in the central European mines which are the largest producers of lead in the Kingdom, as well as in the King Peter and King Alexander canals. American and British capital is invested in bauxite deposits. In other words, foreign capital is participating in the operation of practically every industry of national importance.

GENERAL POSITION IN KINGDOM

In general, foreign capital is subject to exactly the same regulation and taxation as domestic capital. However, article 70 of the "law of budgetary twelfths" for April, May, June, and July, 1925, prescribed the following:

> The Minister of Finance, with the consent of the Ministerial Council, is authorized to exempt from all taxes and dues, in the same way as State bonds, the bonds of industrial enterprises issued on foreign loans, either directly or through the intermediary of the State Mortgage Bank, and intended exclusively for the needs of industrial enterprises having at least 10,000,000 dinars of paid-up capital or of groups of enterprises which together have that amount of capital.

If the bonds are guaranteed by special mortgages these are likewise exempt from all taxes imposed on the guaranties on movable and immovable property, as well as from the tax on these mortgages. These exemptions remain in force until the end of 1930, but bonds issued prior to that date are exempt until their redemption. In

the event that it becomes known that the capital has been employed for purposes other than those indicated in the law the enterprises will be obliged to pay all the taxes and dues chargeable on the entire amount of the loan.

The same law authorizes the Ministry of Finance to exempt from taxes and dues all loans made abroad by local administrative bodies, such as municipalities, districts, and counties, for public works of national utility and general interest. In the matter of the payment of the capital and interest, the Government is authorized to accord to the creditors of the industrial bonds or of the administrative bodies the same legal rights as are accorded to the State Mortgage Bank. This is a very important concession, as the State Mortgage Bank enjoys exceptional privileges which are not usually extended to private creditors. One of the most important of these is the simplification of the procedure in cases where the debtor is unable to meet his obligations.

The taxation on invested capital varies greatly in the different regions, as has already been noted in the section on taxation.

CONTROL OF EXCHANGE

The exchange policy of the Government consists of three factors: (*a*) Control over the import and export of capital; (*b*) the accumulation of a large stock of foreign commercial paper by the National Bank; (*c*) the protection of dinar exchange against violent fluctuations resulting from speculative activity on the bourses.

IMPORTATION OF FOREIGN CAPITAL

The importation of foreign capital into the Kingdom may be legally done in three ways:

(*a*) Foreign currency or bills of exchange may be brought into the country in unlimited quantities, but the regulations provide that they must be sold on the bourse by banks which are authorized to engage in the traffic in foreign exchange. Such authorized banks, which now number about 200, are required to fulfill certain formalities in order to secure this privilege. The taxes paid by such banks for this right amount to 1 per cent of the paid-up capital.

Bills of exchange drawn on domestic banks in foreign money can only be cashed in dinars at the bourse rate of exchange.

(*b*) Domestic banks authorized to engage in foreign-exchange transactions may receive orders for the sale of foreign currencies and values on the bourses of the Kingdom. The payment is made in dinars or else the countervalue is placed to the credit of the drawee, who may dispose of it at will.

(*c*) Foreign banks that are in possession of dinars from the sale of bills of exchange may sell the dinars which are placed to their credit, but the sale can be effected only in the form of letters of credit or by cash debits and credits in accordance with the orders of payment.

In general, foreign capital can be introduced into the Kingdom in the form of bills for the purchase of "free" dinars, and these latter are credited to the owner of the bill sold. The term "free dinars" signifies dinars which result from the sale of foreign currencies or values legally introduced into the Kingdom.

Exports for the most part furnish the stock of "free" dinars. Dinars received by foreign holders in payment of coupons and dividends on domestic securities are also considered "free." Foreign capital invested in such domestic securities may upon the sale of such securities be exported, provided it is shown that they were purchased with "free dinars."

EXPORT OF FOREIGN CAPITAL

The Government has, in its exchange policy, directed its energies toward rendering impossible the movement of such foreign capital as is being utilized solely for speculation in exchange. As a result, there are a number of restrictions on the export of capital. One-third of the proceeds of foreign exchange must be offered by an authorized bank to the National Bank for sale on a domestic bourse, and the other two-thirds must be sold on the bourse the same day by the authorized bank. This procedure not only enables the authorities to ascertain the amount of foreign papers to be offered on the bourse but also enables the National Bank to constitute a stock of foreign bills with which it may intervene to stabilize the exchange. Consequently private banks can not accumulate stocks large enough to affect the market.

Importers purchasing bills for payments abroad must deliver to an authorized bank a guaranty to import within a period of six months goods to the value of the exchange purchased. This affords a means of readily ascertaining the demand for foreign exchange on the bourses.

One financial authority [23] explains the entire question of the restrictions on foreign capital in these terms:

> A bill can not be exported unless it has been previously imported. In order that its entry may be legal, the bill in question must be sold on a home bourse to two-thirds of its value, the remaining third being reserved for the National Bank. The presentation of the third to the National Bank is all that is necessary, and, if the bank refuses it, it may be freely sold. Bills which have been realized in the country in the manner we have described may be exported without any difficulty and their export is quite free. In general, bills bought in the country for free dinars may be freely exported, since all free dinars represent the value of bills sold in the manner prescribed by the regulations—that is, one-third to the National Bank and two-thirds on the stock exchange. In other words, the regulations prohibit the export of foreign capital which has not been realized in the manner legally provided, because it is presumed that the secret import of such foreign capital would encourage speculation. In conclusion we may say that the official exchange policy guarantees the export of foreign capital which has been brought into the country for use in commerce and industry.

[23] Dr. Dushan Mishitch, editor of the Economic and Financial Review.

PROTECTION OF INDUSTRIAL PROPERTY

The legal right to patents, trade-marks, designs, and models is here classed as industrial property.

In pre-war Serbia, no patents were issued and no protection existed for this form of industrial property. Trade-marks, designs, and models, however, were registered in the Commercial Court of Belgrade, and the owners of such industrial property could enforce their rights in the courts. This status continued until the decree of November 15, 1920, instituted, at Belgrade, the Department for the Protection of Industrial Property, an independent Government office, under the supervision of the Ministry of Commerce and Industry, which began to function in 1921. On February 17, 1922, the decree was enacted into law. The department has full charge of all matters pertaining to patents, trade-marks, designs, and models and is solely competent to grant or withdraw industrial rights and to determine the infringement of such rights. On February 7, 1921, the Royal Government adhered to the convention of Paris (1883) as revised at Washington (1911).

PATENTS

Only an inventor, his heirs, or one who has secured legal title to an invention can obtain a patent. However, the first applicant is presumed to be the inventor until a subsequent applicant disproves his claim. An invention, to be patentable, must be new and must not have received such publicity as to render it utilizable by specialists. A patentee may freely dispose of all the rights accruing to him under the patent and may authorize others to use the invention. At his death the rights pass to his heirs.

In the event that a patent covers a process which has been previously used, the user is entitled to continue its use, and, if the patentee is unwilling to grant such a right, the user can obtain the necessary authorization upon application to the Department for the Protection of Industrial Property.

NON-PATENTABLE INVENTIONS

The following are not patentable:

(1) Inventions which are contrary to law, contrary to public morals or which are for the purpose of deception.
(2) Scientific laws and principles.
(3) Inventions in connection with products controlled by the State Monopoly.
(4) Food products for man or beast, medicaments, disinfectants, as well as materials obtained by chemical processes.

The process of manufacture, however, may be patented.

A patent which covers and protects an entire process of manufacture, covers also the direct products of the process.

EXPROPRIATION BY STATE

If the interests of the country require the partial or exclusive use of a patented invention, the State has the right to expropriate it.

The holder, however, is entitled to an indemnity. Similarly, the State has the right to use any invention applicable to the manufacture of munitions and arms, without indemnifying the patentee.

DURATION OF PATENT

Patents are granted for a period of fifteen years, after which all the rights lapse and become public property.

A patent ceases upon the expiration of the period for which the annual and supplementary taxes are paid and, in any event, at the expiration of 15 years.

A patentee may be deprived of his patent rights if he fails to exploit his invention sufficiently, within the Kingdom.

RIGHT OF PRIORITY

Inventions patented abroad have a period of priority of one year, from the date of the original foreign patent, during which the application for a patent may be filed in the Kingdom. After the expiration of this period, the right of application ceases.

APPLICATIONS

Applications must be filed on a prescribed form either by the applicant himself or by his attorney and must contain:

(1) The name, praenomen, profession or occupation of the applicant. If he is represented by an attorney, the same data must be given for this representative.
(2) A short title for the invention.
(3) A guaranty to reimburse the department for all expenses of publication.
(4) Stamps to value of the application fees.

To the application must be joined two copies of an exact description of the invention bearing the signature of the applicant or of his attorney. In the latter case a formal power of attorney must be filed with the department.

The specifications must be so full and clear that experts can construct and utilize the invention without further explanation. They must affirm that the invention is new and original and must close with a summarized statement of just what the inventor desires to protect under patent rights. Drawings—or, if required by the department, models—must be submitted with the specifications.

If the application is found to be in order it is published at the expense of the applicant in the Journal of the Department for the Protection of Industrial Property, and from the date of this publication all legal rights temporarily accrue to the inventor. The original application, specifications, and designs are then placed on public view in the department for two months.

OPPOSITION TO PATENT RIGHTS

Opposition to the granting of the patent must be filed within two months from the first publication and must be based on one of the following reasons or facts:

(1) That the principal features of the invention correspond to one already patented in the Kingdom.
(2) That the invention is not patentable.
(3) That the invention depends upon a previously issued patent.
(4) That the applicant is not the inventor or the legal possessor of the invention.
(5) That the principal features have been copied without authorization from drawings, descriptions, or methods of manufacture already in use.

In the last three cases, only the person or persons whose interests are endangered can file the opposition.

Upon the issuance of a patent, it is inscribed in the register of the Patent Bureau, and the necessary patent letters are granted the patentee.

FEES

The fee for each patent application is 120 dinars, and the annual patent fee progresses gradually from 100 dinars for the first year to 1,520 dinars for the fifteenth year. The patent fees total 8,180 dinars for 15 years.

Non-residents in the Kingdom are required to transact all business with the Department for the Protection of Industrial Property through attorneys who are licensed by the department. The fees of such attorneys vary, but rarely exceed 450 French francs for the filing of patent applications.

This charge includes all fees in connection with the application for the patent, the fees for 500 words of translation, and the patent fee for one year. Additional translation usually costs 5 French francs a hundred words.

TRADE-MARKS

Trade-marks may be in the form of stamps, marks, engravings, reliefs, figures, inscriptions, special pictures or similar graphic representations. The registration of trade-marks for monopolized articles will be granted only at the request of the Autonomous Administration of the State Monopolies, without special license. It is forbidden for trade-marks to use the image of the King or of any member of his family or to reproduce any national or public coat of arms. Trade-marks which are designed to represent only the place, time, and method of manufacture of articles or of classes of goods, their destination, price, weight, and quantity, are not entitled to registration. Trade-marks which are already in general use, or which are of an immoral, false, or deceptive nature, can not be registered.

The rights of protection of a trade-mark cover not only the use of the mark in its original form but also in any possible form in which it may be employed, wholly or partially, in other characters, arrangements, colors, or sizes. However, if the registered trade-mark is in the form of a name, it will not prevent a person of the same name selling goods under that designation. A trade-mark is registered only for a given class of goods, and the same designation may be registered by a different firm for a different class of goods.

DURATION

The duration of the registration of a trade-mark is not limited to any specific time and continues so long as the registration fees and annual taxes are paid.

A trade-mark is inseparable from the business for which it was created, and ceases with the business. If the business is transferred the trade-mark is likewise transferred, but the transfer must be registered in the Department for the Protection of Industrial Property.

APPLICATION AND FEES

The application for the registration of a trade-mark is made on a prescribed form calling for the same information and data as that for

patents. The application must be accompanied by a power of attorney if the application is made through an attorney; by four specimens of the trade-mark, in the form to be used; by a plate or stencil of the trade-mark, and prints or copies made by this plate or stencil; and if the trade-mark is made of glass, metal, earth, or any like substance, two specimens containing the trade-mark.

The application fee is 120 dinars. The annual fee for the protection of trade-marks is 40 dinars. Persons not resident in the Kingdom should file their applications for registration through a licensed attorney. The charge of the better-known attorneys amounts to 400 French francs and includes the cost of translating 500 words, all fees in connection with the application, and the fees for 10 years' registration. Additional translations usually cost 5 French francs a hundred words.

DESIGNS AND MODELS

A design is defined as any drawing or picture which may serve as an example and be applied to some trade, industrial purpose or production. Any plastic representation of an industrial or trade object or any plastic object which may be used on an industrial or trade implement is considered a model.

REGISTRATION AND PROTECTION

The regulations governing the registration and protection of designs and models are practically identical to those governing patents. Registration can be secured only by the creator or originator, his heirs, or by one who has secured legal title to the design or model, but if an employee or worker of a concern creates or originates it the employer is considered the legal owner. Designs and models which are immoral or contrary to law, or made for the purpose of deception, can not be registered. It is forbidden to use the image of the King or of any member of his family or to reproduce the coats of arms of the State. Designs or models of monopolized articles can be registered only at the request of the Autonomous Administration of the State Monopolies.

DURATION

The maximum duration of the registration is 10 years. The protection accorded by registration extends only over the class of goods for which the design or model was made.

APPLICATION AND FEES

The application for registration of designs and models is made in exactly the same manner as patents and on a form calling for the same information as that required for patent applications. The application must be accompanied by a power of attorney, if the application is made through an attorney; by two exhibits in the form of pictures, drawing, and the like of the industrial and trade products the manufacture of which is based on the design or model for which protection is sought; and two copies of the detailed description of the design or model together with drawings or photographs, or an actual copy of the design or model if possible.

The application fee is 120 dinars, and the annual fee is 40 dinars.

Non-residents should apply for the registration of their designs or models through licensed attorneys. The charges of such attorneys

vary according to the amount of work necessary to secure the registration but, in general, are considerably less than those for the registration of trade-marks.

INFRINGEMENT OF INDUSTRIAL RIGHTS

The Department for the Protection of Industrial Property alone determines the infringements of industrial rights and for this purpose maintains a committee to investigate and decide all claims of infringement of patents, trade-marks, designs, and models, and a committee of appeals; any decision of the committee of appeals is final. The plaintiff must in every instance attach to his petition for investigation a guaranty to pay all expenses in case the infringement is not proven.

Damages resulting from the infringement of the rights of industrial property can only be secured through the regular courts.

COPYRIGHTS

There is no copyright law for the Kingdom, and no such protection is accorded.

COMMERCIAL LAW

POWERS OF ATTORNEY

Powers of attorney drawn in the United States and prepared in accordance with American usage are valid in the Kingdom of the Serbs, Croats, and Slovenes provided they bear the legalization of a consular officer of the Kingdom. If they are written in a foreign language they should be accompanied by a duly certified translation into the Serbian, Croatian, or Slovenian language. The authority of the person bearing the power of attorney should be fully described in the acknowledgment. Thus "John Jones, sole owner," etc., or "John Jones, president of the John Jones Manufacturing Co., duly empowered by the statutes of the company to grant powers of attorney," etc.

The form of acknowledgment is immaterial provided it is explicit and describes adequately the authority of the grantor. The authority of the grantee to collect moneys, sue or use money so collected on behalf of the principal, and to contract debts on account of the principal must be specifically stated.

No registration of powers of attorney is necessary, the grantee only being required to exhibit proof of his right to act in case his authority is questioned.

The revocation of a power of attorney may be made by mailing to the grantee a duly legalized notice to that effect. It is advisable, however, that the notification of revocation be sent to a lawyer for presentation to the grantee through official channels so that proof of revocation may be established in the event of litigation. A person continuing to act as attorney after the revocation of the power is liable to prosecution.

BANKRUPTCY AND INSOLVENCY

Bankruptcy proceedings may result from a voluntary declaration of the debtor firm, from an action instituted by the creditors, or from an action initiated by a court. In the first instance, the declaration is made by the head of the insolvent firm who must present to the court the keys and books of the undertakings. The court is then obliged to start immediately the proceedings. In the second case, when one or more creditors present to the court legal claims against a firm alleged to be defaulting on its payments, the court sets a date of a hearing within 15 days of the presentation of the claim.

Bankruptcy proceedings may be initiated by a competent court whenever it becomes known that the head of the firm against which claims have been filed has absconded or fled or, in the case of an inherited estate, when the heirs decline to accept the debts of such an estate. As bankruptcy proceedings are usually long, lasting frequently for more than two or three years, compromise between the creditors and debtors normally affords the best basis of settlement, and it is only

when all hope of a settlement out of court appears futile that recourse is had to bankruptcy proceedings. Compromises are usually handled by a creditor's association which inspects the debtor's financial condition and serves as an intermediary between the two sides of the controversy for the purpose of arriving at a basis of settlement agreeable to both parties. It is hoped in this way to save the firm in financial distress from actual bankruptcy and at the same time to satisfy to the fullest extent the demands of the creditors.

In recent years a number of institutions and business firms have found themselves in financial difficulties owing to the placing of their capital in investments which are not readily converted into liquid funds. Compromises provide the delay necessary for the realization of such "frozen" capital and the settlement of the claims, whereas bankruptcy proceedings would frequently precipitate the disposal at a sacrifice of the frozen assets of the firm, with a resultant loss to both sides.

The notification to creditors is made through the Official Journal, the public press, and by posting. Publication in the Official Journal is considered ample notice to foreign creditors. From the time a firm is declared bankrupt, the administration of all the property of the firm is in the hands of the court.

In order to present proofs of claims against a bankrupt estate, creditors must be represented by duly qualified attorneys resident in the place where the precedings are held. In case creditors fail to be so represented, the court appoints an attorney to whom the creditors are responsible for the expenses incurred in presenting the claims. Bankruptcy proceedings in Serbia are under the jurisdiction of the Commercial Court at Belgrade and in the other Provinces under the commercial sections of the courts of first instance.

PROTEST OF DRAFTS

The cost of protesting drafts in the Kingdom is 15 dinars for drafts up to 1,000 dinars and 25 dinars for all drafts in excess of that amount.

There is no difference in the cost of protesting drafts for non-acceptance and nonpayment.

The protest of a draft against drawee, drawer, and endorsers must be made within 24 hours after maturity. If a draft has not been protested legal action can nevertheless be taken against drawee and drawer at any time within five years.

The time limit for legal action following the protest is 15 days from date of protests against the endorsers and five years against drawees.

If the protest is made after the lapse of 15 days from the date of its entry into the Kingdom, the ordinary tax of 1.5 thousandths of the face value of the draft is increased twentyfold. A translation of the draft must be delivered with the protest.

It is impossible in this country to extend a draft, and in every case where additional time is to be granted a new draft should be drawn.

No days of grace are allowed under laws of the Kingdom. Only official holidays are recognized.

COMMERCIAL OPERATIONS AND PRACTICES

CHAMBERS OF COMMERCE

There are 10 chambers of commerce in this Kingdom. Each of these has a definitely delimited area over which it functions. Their combined districts are coextensive with the area of the Kingdom. Their offices are located in the cities of Belgrade, Zagreb, Ljubljana, Sarajevo, Veliki Bečkerek, Novi Sad, Split, Dubrovnik, Osijek, and Skoplje. Inasmuch as the chambers of commerce in this Kingdom are official organizations created by the Ministry of Commerce and Industry and operate under this ministry, they have definitely prescribed functions. These are, in fact, functions which the ministry possesses but which it delegates to the chambers of commerce.

One of the important functions of the chambers of commerce is the granting of licenses to individuals to engage in business enterprises.

Among other important functions of the chambers of commerce may be mentioned the following: to keep a list of all registered firms, and of all trade-marks and models; to issue certificates of origin; to regulate relations between commercial concerns and their employees; to examine proposals set forth by commercial corporations, tradesmen, and others; to formulate and express opinions regarding commercial laws; to promote trade regulations and to assist in the development of commerce.

STOCK AND PRODUCE EXCHANGES

The only stock exchanges in the Kingdom are in Belgrade and Zagreb. These list only domestic stocks and bonds, but deal in all forms of foreign commercial paper and exchange. The three produce exchanges are at Belgrade, Zagreb, and Novi Sad. They deal only in grain, forage, and other farm products.

MARKET CONDITIONS

Business is organized on the basis of large profits on individual sales; consequently the turnover is comparatively slow. The advantages of small profits on a rapid turnover have not yet been recognized. The merchants engaged in foreign trade are, almost invariably, not only importers and wholesalers but are also retailers in the city in which they are established. They import on their own account and sell wholesale to the smaller stores in their section of the country. As a rule, they maintain comparatively small stocks and rely upon frequent orders at short intervals to supply the demand. Selling on commission has not been developed to any considerable extent, as the profits are not commensurate with those obtained by merchants who purchase and sell on their own account.

Agents and representatives do not usually restrict themselves to a single line of merchandise but handle a wide range of goods which frequently are not at all similar. In pre-war days, both Serbia and

the former Austro-Hungarian Provinces looked to Vienna as their source of supply. Purchases were rarely made except after personal inspection of the goods in the Austrian capital. These direct contacts, after a short time, brought about mutual confidence so that long-term credits were easily obtained. This method of securing stocks left the local merchants entirely unacquainted with markets other than Vienna, made them wary of placing orders with unknown firms, rendered difficult the question of financing imports from more distant markets, and in general resulted in the comparatively slow development of direct commercial relations with other centers. However, since the war more direct contacts are gradually being established with other markets.

Within the Kingdom, the important firms in the large cities were for a long time the sole sources of supply for merchants in the country districts, but here again there has been a steady process of decentralization. The rural dealers are more and more relying upon orders placed with traveling salesmen of foreign firms, thus eliminating the domestic middlemen.

Foreign manufacturers in near-by countries send their salesmen throughout the Kingdom periodically. These take orders, see that deliveries are effected promptly, and do everything possible to satisfy their clients. They gain, in this way, a clear knowledge of local conditions and are able to arrange credit terms which are advantageous to both exporter and importer. Heavy articles, such as machinery, and goods from distant countries are sold through general representatives, agents, or commission merchants. The representatives and agents are usually large merchants who buy for their own account, sell retail in their own stores, and act as distributers to the smaller merchants of the district. With the exception of "colonial goods" and textiles, sales are rarely effected through commission merchants.

The purchase of goods from catalogues is entirely contrary to the habits and training of the merchant class, which invariably insists upon either first seeing the goods or else upon having the advantage of interviews with a representative of the selling firm.

GOVERNMENT ADJUDICATIONS

Government purchases of any importance are always made by adjudications. In order to submit tenders, guaranties must be deposited which amount to 5 per cent of the bid where domestic material is offered by local firms, while foreigners must deposit 10 per cent regardless of the origin of the material. Local bidders must also deposit 10 per cent with tenders for foreign products. No concession in the matter of price is made to nationals. The call for bids usually is issued from 30 to 60 days before the date fixed for the adjudication. Specifications must be accurately met.

Legally it is not necessary to have an agent on the spot, but in practice it is virtually impossible to consummate transactions with the Government without a local representative.

ADVERTISING

The development of sales by advertising has progressed little in the Kingdom. Once an article has found a fair market in the country, impetus can be given sales by advertising, but publicity as a means of

acquiring a foothold in the market would probably give only slight results, as such a procedure is contrary to the habits of the people.

Street signs, posters, and insertions in the newspapers are about the only forms of publicity employed.

TRADE FAIRS

The trade fairs represent one of the most effective agencies for the introduction of foreign goods into the Kingdom. Samples and demonstrations are preferred by the prospective purchaser rather than illustrated and printed material. These fairs, which are usually organized in the late spring and early fall, are looked forward to with keen interest by the local merchants, and the large attendance and volume of business closed at past fairs indicate their importance to foreign exhibitors, whose displays are constantly increasing.

The success of earlier fairs, first held at Ljubljana and Zagreb, have resulted in their continuation at these cities. The annual fairs at Ljubljana rank next to those of Zagreb in commercial importance in Yugoslavia. Smaller fairs are also held periodically at Belgrade and Novi Sad, while Subotica held its first Samples Fair in 1925. In 1926, at the Sixth International Samples Fair held at Ljubljana, there were 21 different classes of exhibits displayed, including machinery, iron and steel products, agricultural machinery and implements, automobiles, etc. Foreign exhibits were mostly from Czechoslovakia, Austria, Germany, and France, while Poland was represented for the first time. At the Zagreb Spring Fair in 1926 the exhibits were divided into five classess, namely, automobiles, agricultural machinery, radio apparatus, wine, and international posters. American exhibits were prominent among the automobile displays at this fair. Announcement of the dates on which the various fairs are held is usually made sufficiently in advance to enable foreign participants to make reservations for space and send exhibits.

CREDITS AND SELLING TERMS

Serbo-Croat-Slovene importers and merchants are accustomed to receive credit ranging from 60 to 90 days or even longer, depending upon the commodity. Certain foreign exporters and manufacturers, in an effort to extend their trade rapidly, sometimes ship to local firms on consignment.

The more important concerns are able to furnish bank guaranties as a basis for credit. In the case of distant countries, credit terms are of prime importance, as the capital of the importer is tied up for a longer period and the interest paid necessarily increases the selling price of the articles sold. Imports from the United States are obtained on acceptance credits or else are shipped "cash against documents."

Quotations should be c. i. f. an Adriatic port, include packing and all miscellaneous charges, and state the time necessary to make delivery. This last is exceedingly important, as importers do not carry large stocks and consequently rely upon prompt deliveries.

INTEREST RATES ON COMMERCIAL CREDITS

Imports from the United States are usually obtained on acceptance credits, the interest for which is 6 per cent per annum. The interest on loans within the Kingdom ranges from 15 to 18 per cent.

CREDIT INFORMATION

Credit information concerning firms within the Kingdom is obtainable through local banks or through commercial reporting agencies. In Belgrade banks are mostly employed for this purpose, while in Zagreb the commercial reporting agencies usually perform this function. Both the banks and the agencies charge small fees for such services, but the latter have an arrangement whereby firms may subscribe for such information service for a year, provided the number of reports does not exceed a stated maximum

ROUTING OF SHIPMENTS

It is essential that exporters follow explicitly the instructions given them by local importers as to the routing of shipments. Considerable difficulty and the loss of trade has resulted, in a number of cases, through the failure of exporters to comply with the directions given with the order. In the absence of such instructions shipments should be routed to an Adriatic port by direct steamers. There is such a service from New York, to Gruz and Trieste.

PACKING REQUIREMENTS

Shipments should be packed staunchly in order to resist rough handling at the ports, as unloading is often done by boat winches or by hand and in order to withstand the wear and tear of possible frequent transshipment in effecting distribution within the Kingdom. The effect of heavy packing on the import duties may be seen from the following:

Specific duties are assessed on the gross weight of goods the duties of which are presumed not to exceed 10 dinars per kilo; on the actual weight of the goods when they are of such a nature as not to require packing; and in all other cases on the net weight.

CERTIFICATES OF ORIGIN

Freight shipments from any country having a commercial convention with this Kingdom should be accompanied by a properly executed certificate of origin, as such goods are granted a minimum tariff rate which is considerably lower than the general or maximum tariff rate.

The certificates of origin, to be effective, (1) must be issued by organizations or persons recognized as proper authorities and (2) they must contain certain essential specifications.

The issuing authorities generally recognized in this Kingdom are (1) chambers of commerce or other official organizations of merchants and manufacturers and (2) municipal authorities. In countries where neither the chambers of commerce nor the municipal authorities recognize the issuance of certificates of origin as one of their functions, such certificates signed by Serbo-Croat-Slovene consulates are accepted. For goods coming from the United States a declaration of origin made by the shipper and sworn to before a notary public has been held satisfactory.

Customs difficulties may arise in the case of goods which, in transit, are stored in foreign warehouses. When such goods are separated for redistribution or resale, accompanied by so-called warehouse certificates of origin the customs officials here generally assess them

at their maximum rates. This is done to encourage direct representation of foreign firms in the Kingdom and to free local merchants from the control of foreign central distributing agencies. When, however, the goods are stored in ocean ports and remain intact, being held until such time as they can be conveniently transshipped to the Kingdom, no particular difficulty is experienced in obtaining for them the minimum tariff rates.

Occasionally goods coming from a country having a commercial convention with this Kingdom are assessed the maximum tariff rates because the accompanying certificates of origin are lacking in certain required specifications. These specifications include: Number of packages, bales, etc., kind of packing, gross and net weights.

POSTAGE

The usual foreign postage rates apply to mail from the United States to the Kingdom of the Serbs, Croats, and Slovenes. Letters weighing 20 grams or less to a foreign country pay 3 dinars, and postal cards, 1.50 dinars. The domestic rates are 1 dinar for letters weighing 20 grams or less and 0.50 dinars for postal cards. The fee for registration is in all cases 3 dinars.

PARCEL POST

A parcel-post agreement between the United States and the Kingdom of the Serbs, Croats, and Slovenes was signed in 1922. By the terms of this accord the maximum measurement of parcels is fixed at 1.05 meters if the largest circumference is 1.80 meters or less, or 0.75 meters in length if the largest circumference is 2 meters or less. In no case can the length exceed 1.05 meters or the circumference 2 meters. The maximum weight is fixed at 10 kilos.

The rates, which are subject to change, may be ascertained by inquiry to the postal authorities in the United States.

LANGUAGES

The native languages are Serbian, Croatian, and Slovenian, but German is almost invariably used in commercial correspondence with foreign countries, although French is understood by a fair percentage of the merchants. Catalogues and price lists sent to this country should preferably be in the German language.

WEIGHTS AND MEASURES

Metric weights and measures are in general use, though a few local units are employed in the country districts, the most usual being:

Local unit	Metric equivalent
Oke	1.282 kilos.
Lanac	0.5755 hectare.
Yutro	0.4 hectare.
Ralo	0.25 hectare.
Rif	0.777 meter.
Arsim	0.66 meter.
Hvat	2 meters (approximately).
Akov	50 liters (approximately).

NOTE.—Kilo=2.2046 pounds; hectare=2.47 acres; meter=3.28 feet; liter=0.264 gallon.

APPENDIX

Imports into Kingdom

[Value of 1 dinar in U. S. currency: 1924, $0.01268; 1925, $0.0171; 1926, $0.0176]

Articles	1924		1925		1926	
	Quantity	Dinars	Quantity	Dinars	Quantity	Dinars
Grain...kilos	12,433,413	39,277,745	37,181,862	134,464,844	9,154,803	19,561,872
Rice...do	19,536,572	127,789,833	20,489,667	118,562,137	21,447,183	112,661,457
Vegetables...do	5,785,889	32,914,305	4,700,329	17,450,012	9,920,782	27,230,973
Fruit...do	199,582	1,200,753	614,662	6,558,938	783,759	8,919,298
Tropical fruit...do	9,598,603	62,113,327	11,632,202	63,642,926	13,386,227	55,631,098
Colonial goods and substitutes...kilos	10,137,370	278,043,082	11,243,720	310,474,339	10,676,970	273,154,759
Oleaginous fruits, seeds...kilos	8,476,171	68,246,340	12,718,126	89,858,689	12,152,618	78,216,187
Flowers, ornamental plants...kilos	95,178	1,664,012	131,112	2,437,227	176,904	2,861,445
Forage plants...do	1,430,887	1,318,867	1,218,736	993,537	638,076	751,898
Industrial and medicinal plants (cotton and other textile fibers, tobacco, etc.)...kilos	10,206,458	191,909,709	8,422,716	209,209,129	8,984,947	208,223,735
Extracts from fruits and vegetables...kilos	27,804	615,430	27,008	609,478	25,109	907,680
Total agricultural products...kilos	77,928,017	805,093,403	108,380,640	954,351,306	87,347,378	788,120,402
Live animals:						
Kilos	1,394	30,988	2,190	47,192	1,103	798,115
Number	12,628	3,598,365	6,261	4,658,218	413	
Meat and meat products...kilos	361,247	7,886,324	25,494	899,380	12,210	649,350
Milk and eggs...do	250	6,100	249	3,800	959	8,192
Honey and wax...do	47,532	1,533,583	42,619	1,504,120	34,243	1,077,300
Animal fats...do	10,109,460	186,046,417	4,818,999	64,452,157	3,924,984	36,958,096
Wool, hair, skins...do	7,534,002	182,674,473	9,969,226	252,458,406	13,639,498	321,337,109
Fish and fish products...kilos	11,412,817	18,923,623	844,277	10,775,469	970,592	10,670,073
Other animal products...kilos	315,192	3,277,562	1,267,066	6,414,442	1,925,168	9,832,076
All other animals:						
Kilos	629	26,895	2,039	98,615	6,810	269,429
Number	186	238,020	426	56,800		
Total animal products:						
Kilos	19,782,523	400,405,965	16,972,159	336,653,581	20,515,567	
Number	12,814	3,836,385	6,687	4,715,018	413	
		404,241,350		341,368,599		381,599,740
Forestry products:						
Kilos	4,658,231	26,325,751	4,769,499	24,830,489	4,082,720	
Cubic meters	211,198	44,061,340	316,623	64,738,370	92,296	
Total		70,387,091		89,568,859		45,970,064
Flour-mill products...kilos	50,601,103	430,542,104	64,112,077	361,720,696	15,063,413	123,458,784
Beverages...do	184,416	4,068,546	269,427	4,450,369	195,982	2,791,810
Yeast and vinegar...do	441,410	3,698,700	54,500	636,896	12,940	136,327
Water and ice...do	329,604	1,124,880	519,512	1,550,446	931,257	2,237,995
Residue from transformation of agricultural products...kilos	1,736,397	2,976,108	1,268,524	2,180,289	211,361	358,544
Total...do	53,292,930	442,410,338	66,224,040	370,538,696	16,414,953	128,983,460
Food products, n. e. s...kilos	1,162,392	39,586,811	1,184,941	37,453,953	1,203,574	35,980,710
Tobacco products...do			32	7,870	5	530

IMPORTS INTO KINGDOM—Continued

Articles	1924		1925		1926	
	Quantity	Dinars	Quantity	Dinars	Quantity	Dinars
Earth and stone..kilos..	102, 188, 728	26, 791, 063	73, 839, 784	30, 452, 434	36, 690, 536	32, 039, 685
Ores, slags, cinders ..kilos..	23, 360, 706	23, 591, 643	13, 928, 807	10, 231, 772	30, 062, 042	26, 242, 625
Coal..do..	333, 765, 510	213, 023, 618	545, 978, 077	269, 174, 445	440, 528, 742	199, 239, 974
Mineral oils..do..	74, 003, 583	265, 166, 980	100, 131, 511	296, 147, 516	112, 475, 907	283, 409, 872
Total minerals and mineral oils..kilos..	533, 318, 527	528, 573, 304	733, 878, 179	606, 006, 167	619, 757, 227	540, 932, 156
Wax..do..	2, 601, 187	27, 674, 059	2, 248, 908	21, 397, 859	2, 670, 142	22, 407, 422
Candles..do..	18, 871	349, 502	26, 758	382, 291	8, 673	133, 169
Wax products, soap, etc. ..kilos..	2, 843, 793	38, 157, 975	1, 934, 542	27, 922, 370	1, 265, 508	19, 858, 637
Total wax and greases..kilos..	5, 463, 851	66, 181, 536	4, 210, 208	49, 702, 520	3, 944, 373	42, 399, 228
Chemical and pharmaceutical products:						
Inorganic materials—						
Kilos	28, 383, 702	101, 857, 530	93, 015, 645	260, 177, 227	109, 684, 408	245, 216, 120
Pieces	252, 291	1, 073, 417	311, 098	1, 344, 288	345, 621	
Organic combinations..kilos..	2, 249, 486	42, 940, 101	3, 627, 686	54, 279, 717	4, 734, 628	63, 173, 615
Paints, inks, and crayons..kilos..	8, 399, 130	81, 739, 134	5, 960, 076	67, 303, 583	5, 301, 051	67, 586, 558
Varnishes, lacquers, glues, etc..kilos..	677, 492	11, 477, 372	418, 334	6, 894, 838	164, 382	4, 708, 287
Ethers, perfumes, and cosmetics..kilos..	627, 899	22, 037, 083	620, 643	26, 116, 658	654, 983	26, 253, 660
Artificial fertilizers ..kilos..	14, 310, 855	8, 806, 726	19, 649, 564	12, 730, 546	27, 323, 947	13, 551, 070
Gunpowder, explosives, matches, and other inflammable articles ..kilos..	651, 323	18, 821, 920	539, 745	20, 373, 106	396, 365	15, 274, 219
Total chemical and pharmaceutical products:						
Kilos	55, 299, 887	287, 679, 866	123, 831, 693	447, 875, 675	148, 249, 764	
Pieces	252, 291	1, 073, 417	311, 098	1, 344, 288	345, 621	
		288, 753, 283		449, 219, 963		435, 763, 529
Textiles:						
Cotton..kilos..	22, 725, 765	2, 045, 772, 985	24, 580, 692	1, 900, 948, 324	21, 334, 116	1, 507, 980, 02
Hemp, flax, etc. ..kilos..	8, 723, 380	209, 935, 752	10, 528, 674	246, 601, 638	7, 882, 993	163, 009, 201
Wool and other hair ..kilos..	4, 559, 042	699, 176, 809	4, 755, 918	723, 002, 898	4, 330, 622	660, 591, 848
Silk..do..	182, 264	103, 475, 287	309, 882	169, 583, 465	441, 932	202, 986, 208
Coated or impregnated tissues ..kilos..	570, 774	23, 950, 417	626, 213	27, 725, 737	696, 320	25, 039, 772
Felt and felt products..kilos..	34, 675	2, 516, 348	42, 656	3, 891, 344	42, 967	4, 111, 796
Animal hair, n. e. s ..kilos..	52, 423	4, 456, 945	74, 555	7, 231, 229	57, 297	4, 139, 413
Clothing:						
Kilos	683, 902	124, 033, 439	702, 220	168, 472, 867	532, 362	189, 390, 393
Pieces	1, 330, 530	64, 562, 946	1, 345, 831	62, 541, 991	1, 237, 343	
Waste fabrics..kilos..	1, 201, 628	10, 457, 722	1, 020, 203	8, 745, 320	1, 945, 026	15, 880, 218
Total textiles:						
Kilos	38, 733, 853	3, 223, 775, 704	42, 641, 013	3, 256, 202, 822	37, 263, 635	
Pieces	1, 330, 530	64, 562, 946	1, 345, 831	62, 541, 991	1, 237, 343	
		3, 288, 338, 650		3, 318, 744, 813		2, 773, 128, 870
Leather and leather articles..kilos..	3, 489, 578	257, 350, 183	2, 485, 002	237, 396, 471	1, 585, 965	176, 484, 593
Fur and fur articles ..kilos..	39, 003	15, 503, 376	71, 896	24, 025, 181	48, 544	16, 815, 950
Articles made of animal intestines..kilos..	504	56, 365	1, 270	139, 760	843	189, 530
Total..do..	3, 529, 085	272, 909, 914	2, 558, 168	261, 561, 412	1, 635, 352	193, 490, 073

Imports into Kingdom—Continued

Articles	1924		1925		1926	
	Quantity	Dinars	Quantity	Dinars	Quantity	Dinars
Soft india rubber...kilos	858, 160	63, 466, 920	1, 061, 171	71, 244, 096	1, 236, 509	82, 550, 133
Hard india rubber...do	21, 954	1, 637, 830	22, 712	2, 403, 140	17, 458	2, 346, 167
Total india rubber and gutta-percha...kilos	880, 114	65, 104, 750	1, 083, 883	73, 647, 236	1, 253, 967	84, 896, 300
Wickerwork articles, various...kilos	69, 529	2, 600, 676	64, 083	3, 025, 508	62, 118	3, 795, 504
Brushes and sieves...do	77, 754	5, 756, 933	79, 003	5, 701, 611	52, 853	4, 405, 929
Animal carving materials, and articles thereof...kilos	78, 932	10, 037, 512	90, 890	16, 265, 359	101, 298	14, 843, 067
Vegetable carving materials...kilos	116, 479	14, 960, 781	141, 751	19, 854, 357	182, 193	27, 161, 433
Articles of cork...do	265, 985	6, 491, 067	333, 455	6, 424, 343	319, 318	5, 319, 468
Articles of wood...do	6, 954, 796	48, 381, 764	5, 058, 996	44, 309, 299	5, 192, 732	50, 832, 309
Paper and paper articles...kilos	21, 386, 544	151, 000, 403	25, 143, 433	163, 211, 937	33, 337, 495	194, 390, 326
Books, maps, and pictures...kilos	244, 807	12, 922, 718	353, 392	19, 885, 159	443, 542	21, 824, 710
Total paper products...kilos	21, 631, 351	163, 923, 121	25, 496, 825	183, 097, 096	33, 781, 037	216, 215, 036
Articles of stone...do	9, 625, 290	20, 768, 472	4, 398, 256	15, 818, 687	3, 061, 433	13, 058, 840
Articles of clay, plaster, asphalt, cement, etc...kilos	19, 794, 918	67, 697, 596	22, 967, 615	81, 949, 729	24, 017, 302	77, 371, 672
Total...do	29, 420, 208	88, 466, 068	27, 365, 871	97, 768, 416	27, 078, 735	90, 430, 512
Glass and glass articles...kilos	17, 333, 667	136, 263, 534	14, 303, 991	118, 422, 779	14, 823, 574	102, 927, 393
Precious metals...do	1, 464	7, 347, 995	1, 773	16, 564, 915	2, 752	18, 471, 618
Iron and iron articles...kilos	120, 238, 685	742, 750, 395	142, 209, 867	770, 067, 305	132, 106, 182	659, 752, 869
Aluminum and alloys...kilos	168, 733	9, 740, 395	78, 343	6, 548, 257	90, 199	6, 911, 611
Lead and alloys...do	566, 682	10, 210, 492	419, 021	9, 447, 928	418, 389	9, 781, 526
Zinc and alloys...do	149, 553	3, 164, 154	111, 868	3, 413, 446	185, 886	3, 811, 681
Tin and alloys...do	302, 985	11, 722, 899	427, 869	20, 283, 946	455, 093	23, 666, 451
Nickel and alloys...do	32, 253	2, 335, 703	593, 037	25, 748, 830	479, 958	24, 252, 775
Copper and alloys...do	2, 733, 157	96, 570, 847	3, 068, 023	106, 591, 316	4, 495, 392	128, 151, 394
All other metals and metal products...kilos	161, 538	26, 647, 793	100, 600	22, 049, 995	68, 197	18, 893, 945
Total metals and metal products...kilos	124, 355, 050	910, 490, 673	147, 010, 401	980, 715, 938	138, 302, 048	893, 693, 870
Machines and apparatus...kilos	15, 440, 960	267, 507, 648	23, 883, 075	368, 874, 524	22, 925, 518	384, 667, 058
Electrical machinery...kilos	3, 885, 713	107, 317, 224	3, 370, 483	108, 867, 959	3, 278, 360	127, 918, 814
Vehicles:						
Kilos	2, 240, 849	34, 066, 413	2, 502, 728	31, 174, 759	4, 827, 791	148, 885, 936
Number	5, 173	82, 656, 327	11, 261	122, 030, 512	11, 079	
Total machines, apparatus, vehicles, etc:						
Kilos	21, 567, 522	408, 891, 285	29, 756, 286	508, 917, 242	31, 031, 669	
Pieces	5, 173	82, 656, 327	11, 261	122, 030, 512	11, 079	
		491, 547, 612		630, 947, 754		661, 471, 808
Scientific articles, instruments, and apparatus, n. e. s.:						
Kilos	227, 148	21, 874, 975	307, 436	37, 931, 186	410, 433	
Pieces	661	10, 357, 200	859	13, 153, 410	883	
		32, 232, 175		51, 084, 596		71, 486, 832

Imports into Kingdom—Continued

Articles	1924		1925		1926	
	Quantity	Dinars	Quantity	Dinars	Quantity	Dinars
Toys, firearms, clocks, and watches:						
Kilos	252,132	24,587,318	338,953	28,273,727	239,064	
Pieces	59,111	14,422,888	65,662	14,816,562	54,471	
		39,010,206		43,090,289		37,931,053
Grand total:						
Kilos	1,016,399,963	8,000,773,049	1,356,082,396	8,469,538,588	1,193,245,587	
Pieces	1,660,580	176,909,163	1,741,398	218,601,781	1,649,810	
Cubic meters	211,198	44,061,340	316,623	64,738,370	92,296	
Dinars		8,221,743,552		8,752,878,739		7,631,779,276
Dollars		$104,257,463		$148,757,184		$134,319,316

Exports from Kingdom

Articles	1924		1925		1926	
	Quantity	Dinars	Quantity	Dinars	Quantity	Dinars
Grain—kilos	454,088,043	1,389,934,216	1,217,071,390	2,638,390,922	1,242,039,129	2,269,768,753
Rice—do	25,324	257,285	5,891	57,849	3,169	30,419
Vegetables—do	47,873,960	189,373,171	34,222,586	92,056,700	53,464,499	94,688,962
Fruit—do	32,625,440	250,712,212	56,246,544	261,564,807	86,920,192	325,450,340
Tropical fruit—do	297,903	3,957,126	58,283	704,751	221,460	1,667,442
Colonial goods and substitutes—kilos	132,077	1,362,230	33,367	674,586	77,824	579,045
Oleaginous fruits, seeds—kilos	2,908,287	23,228,906	5,254,217	15,505,485	8,385,240	16,615,054
Flowers, ornamental plants—kilos	26,240	527,845	1,414	10,814	30,488	87,172
Industrial and medicinal plants (cotton and other textile fibers, tobacco, etc.)—kilos	25,626,341	161,504,160	42,260,107	392,914,742	21,603,526	266,042,072
Forage plants—do	13,262,044	18,070,375	7,676,049	8,891,863	3,988,368	3,639,437
Extracts from fruits and vegetables—kilos	856,971	6,431,282	1,098,945	6,249,958	3,072,204	14,991,200
Total agricultural products—kilos	577,722,630	2,045,358,808	1,363,928,793	3,417,022,477	1,419,806,099	2,993,559,896
Live animals:						
Kilos	1,645,491	45,647,423	1,253,695	21,935,010	1,363,160	922,424,133
Number	698,429	1,353,065,353	723,032	765,389,145	1,064,804	
Meat and meat products—kilos	18,778,931	520,747,666	17,796,495	353,229,473	22,371,874	350,455,545
Milk and eggs—do	31,711,763	647,644,061	33,120,051	622,841,272	32,707,902	609,766,596
Honey and wax—do	106,516	1,914,174	44,875	1,036,647	104,940	1,665,546
Animal fats—do	87,259	2,184,065	311,900	3,758,549	1,605,641	25,962,556
Wool, hair, skins—do	4,943,079	331,577,881	3,864,677	182,175,878	4,251,924	155,598,335
Fish and fish products—kilos	2,734,297	30,535,154	3,156,273	22,184,327	3,071,978	17,062,379
Other animal products—kilos	1,130,535	27,617,801	755,072	12,640,976	842,775	7,312,777
All other animals:						
Kilos	61,911	1,015,795	43,103	722,310	41,912	685,574
Head	1	9,000				
Total animal products:						
Kilos	61,199,782	1,608,884,020	60,346,141	1,220,524,442	66,362,106	
Head	698,430	1,353,074,353	723,032	765,389,145	1,064,804	
		2,961,958,373		1,985,913,587		2,090,933,441
Forestry products:						
Kilos	1,618,545,192	1,889,395,782	1,421,096,457	1,344,108,933	1,559,252,133	
Pieces	1,025,199	54,343,102	1,380,230	72,825,035	2,195,699	
Total		1,943,738,884		1,416,933,968		1,089,583,997

EXPORTS FROM KINGDOM—Continued

Articles	1924		1925		1926	
	Quantity	Dinars	Quantity	Dinars	Quantity	Dinars
Flour-mill products ---kilos	63, 728, 089	401, 396, 889	47, 691, 579	315, 423, 784	36, 287, 787	177, 128, 702
Beverages---do	2, 781, 731	28, 978, 649	2, 136, 707	19, 799, 767	3, 305, 492	22, 960, 692
Yeast and vinegar do	13, 139	242, 775	597	3, 860	10, 668	33, 025
Water and ice---do	552, 912	672, 311	1, 527, 440	2, 155, 949	1, 836, 137	2, 402, 888
Residue from transformation of agricultural products---kilos	22, 273, 123	42, 267, 124	33, 020, 061	51, 158, 791	33, 220, 593	42, 965, 256
Total---do	89, 348, 994	473, 557, 748	84, 376, 384	388, 542, 151	74, 660, 677	245, 490, 563
Food products, n. e. s. ---kilos	4, 062, 546	140, 550, 254	2, 629, 064	79, 545, 206	2, 212, 551	53, 367, 549
Tobacco products ---estimated pounds			5, 905, 740	46, 127, 480		165
Earth and stone--kilos	637, 923, 842	222, 107, 798	727, 085, 596	230, 369, 311	710, 889, 634	168, 315, 646
Ores, slags, cinders ---kilos	293, 413, 084	156, 381, 748	160, 744, 858	41, 512, 501	409, 705, 292	81, 263, 571
Coal---do	224, 266, 503	119, 017, 735	151, 349, 800	54, 491, 864	169, 021, 182	42, 691, 310
Mineral oils---do	208, 860	1, 243, 593	291, 221	2, 187, 339	289, 064	1, 110, 048
Total minerals and mineral oils ---kilos	1, 155, 812, 289	498, 750, 874	1, 039, 471, 475	328, 561, 015	1, 289, 905, 172	293, 380, 575
Wax---do	6, 077	53, 800	209	10, 267	2, 562	49, 885
Candles---do	4, 959	80, 911	1, 235	31, 289	931	20, 204
Wax products, soap, etc. ---kilos	43, 573	654, 936	22, 751	206, 528	326, 335	3, 440, 908
Total wax and greases---kilos	54, 609	789, 647	24, 195	248, 084	329, 828	3, 510, 997
Chemical and pharmaceutical products: Inorganic materials	47, 343, 320	174, 150, 393	35, 677, 396	106, 054, 949	30, 723, 408	77, 705, 464
Organic combinations---kilos	33, 371, 553	163, 619, 330	37, 635, 225	146, 003, 639	41, 146, 720	148, 744, 900
Paints, inks, and crayons---kilos	487, 708	4, 975, 619	597, 003	5, 310, 837	485, 326	3, 170, 246
Varnishes, lacquers, glues, etc---kilos	53, 048	146, 000	219	1, 170		
Ethers, perfumes, and cosmetics---kilos	1, 915, 387	18, 175, 600	2, 529, 458	29, 944, 882	2, 152, 862	33, 124, 548
Artificial fertilizers ---kilos	21, 636, 272	29, 055, 923	26, 329, 058	34, 798, 015	42, 798, 811	64, 927, 720
Gunpowder, explosives, matches, and other inflammable articles ---kilos	5, 435	231, 900	16, 072	278, 150	64	500
Total chemical and pharmaceutical products ---kilos	104, 812, 723	390, 354, 765	102, 784, 431	322, 391, 642	117, 307, 191	327, 673, 378
Textiles: Cotton---do	366, 578	24, 505, 603	784, 815	39, 364, 253	219, 146	7, 442, 328
Hemp, flax, etc. ---kilos	7, 274, 355	165, 687, 588	9, 429, 588	133, 122, 916	14, 437, 105	106, 722, 004
Wool and other hair ---kilos	16, 329	2, 594, 338	36, 919	2, 472, 577	17, 561	1, 144, 829
Silk---do	9, 936	2, 955, 003	32, 873	19, 110, 543	30, 430	18, 861, 750
Coated or impregnated tissues ---kilos	28, 284	1, 680, 901	22, 545	1, 192, 328	9, 627	455, 440
Felt and felt products---kilos					320	59, 150
Animal hair, n. e. s. ---kilos	3, 454	874, 057	9, 758	3, 017, 295	2, 344	384, 425
Clothing: Kilos	18, 927	3, 070, 620	8, 852	1, 046, 553	3, 475	11, 724, 999
Pieces	227, 236	9, 708, 949	111, 835	5, 979, 086	317, 771	
Waste fabrics--kilos	2, 636, 182	4, 207, 481	1, 991, 209	3, 477, 503	1, 070, 438	2, 963, 956
Total textiles: Kilos	10, 354, 045	205, 575, 591	12, 316, 559	202, 803, 968	15, 790, 446	
Pieces	227, 236	9, 708, 949	111, 835	5, 979, 086	317, 771	
		215, 384, 540		208, 883, 054		149, 758, 881

EXPORTS FROM KINGDOM—Continued

Articles	1924		1925		1926	
	Quantity	Dinars	Quantity	Dinars	Quantity	Dinars
Leather and leather products.....kilos..	1,134,083	46,135,655	1,230,550	22,387,053	3,448,928	21,721,716
Fur and fur articles.....kilos..	160	67,420	242	308,660	460	136,300
Total.....do...	1,134,243	46,203,075	1,230,075	22,695,713	3,449,388	21,858,016
Soft india rubber...do...	1,437	138,060	34,506	658,239	26,652	964,570
Hard india rubber...do...	21,045	2,432,694	982	76,530	2	180
Total india rubber and gutta-percha.....kilos..	22,482	2,570,754	35,488	734,769	26,654	964,750
Wickerwork articles.....kilos..	551,774	3,918,108	105,339	1,023,439	72,504	388,311
Brushes and sieves...do...	203,682	4,704,817	94,304	1,614,684	101,864	1,567,316
Animal carving materials, and articles thereof.....kilos..	2,585	192,290	1,036	84,033	713	142,570
Vegetable carving materials.....kilos..	4,000	214,407	2,748	182,330	730	52,210
Articles of wood...do....	9,017,793	65,130,330	17,135,600	79,813,457	12,864,238	35,769,456
Articles of cork...do....	10,497	939,900	11,431	39,100	120,893	283,362
Paper and paper articles.....kilos..	8,401,301	60,109,855	13,578,477	75,287,226	13,541,024	75,057,764
Books, maps, and pictures.....kilos..	39,464	1,840,506	73,989	1,318,852	22,879	1,110,614
Total paper products.....kilos..	8,440,765	61,950,361	13,652,466	76,606,078	13,563,903	76,168,378
Articles of stone, cement, plaster, asphalt, etc.....kilos..	3,638,162	10,241,857	6,357,997	15,804,584	23,967,054	22,587,488
Articles of clay...do....	54,753,135	29,682,067	27,507,431	15,348,447	8,864,588	3,586,296
Total stone, cement, plaster, asphalt, and clay articles...kilos..	58,391,297	39,923,924	33,865,428	31,153,031	32,833,642	26,173,784
Glass and glass articles.....kilos..	1,012,884	9,507,856	601,932	3,337,431	634,192	4,011,850
Precious metals...do....	31	88,550	1,257	236,980	13,641	400,000
Iron and iron articles.....kilos..	7,777,160	89,241,906	7,212,928	74,294,051	3,141,837	26,492,954
Aluminum and alloys.....kilos..	284	3,630	830	10,550	4,296	50,250
Lead and alloys...do....	10,679,252	135,671,946	10,808,700	134,176,404	9,583,217	97,384,024
Zinc and alloys...do....	781,653	9,260,828	2,115,044	21,179,712	1,309,502	12,142,300
Tin and alloys...do....	286	18,900	25,313	128,460	1,456	40,475
Nickel and alloys...do....	339	12,100	18	5,100		
Copper and alloys...do....	7,612,109	348,147,447	7,895,379	229,028,275	10,782,432	251,669,234
All other metals and metal products...kilos..	91	60,050	143	20,200	493	341,650
Total metals and metal products.....kilos..	26,851,205	582,505,357	28,059,612	459,079,732	24,836,874	388,520,887
Machines and apparatus.....kilos..	937,455	11,042,045	1,534,006	9,418,407	710,689	6,626,427
Electrical machinery.....kilos..	5,311,173	26,965,535	4,702,430	18,212,900	1,244,384	5,315,805
Vehicles:						
Kilos.....	214,748	4,070,965	468,915	3,635,946	113,598	1,934,680
Pieces.....	41	1,947,100	2	616,000	2	
Total machines, apparatus, vehicles, etc.:						
Kilos.....	6,463,376	42,078,545	6,705,351	31,267,253	2,068,671	
Pieces.....	41	1,947,100	2	616,000	2	
		44,025,645		31,883,253		13,876,912

EXPORTS FROM KINGDOM—Continued

Articles	1924		1925		1926	
	Quantity	Dinars	Quantity	Dinars	Quantity	Dinars
Scientific articles, instruments, and apparatus, n. e. s.:						
Kilos	7,810	776,923	13,489	737,285	9,903	
Pieces	4	66,500	1	8,000	2	
		843,423		745,285		975,930
Clocks and watches:						
Pieces	545	79,457	120	11,300	104	2,830
Kilos	12	30,300	1	200		
Firearms kilos	139	58,550	74	15,000	2,815	156,500
Toys do	796	14,930	302	20,261	175	7,590
Total clocks, watches, toys, and firearms:						
Kilos	1,480	152,937	496	46,561	3,094	
Pieces	12	30,300	1	200		
		183,237		46,761		166,920
Articles not specially classified kilos	945,810	5,617,155	180,453	1,431,598		
Grand total:						
Kilos [1]	3,734,974,403	8,119,604,128	4,189,634,197	8,059,721,862	4,636,213,468	
Pieces	1,950,922	1,419,170,304	2,215,101	844,817,466	3,578,278	
Dinars		9,538,774,432		8,904,539,328		7,818,180,094
Dollars		$120,958,337		$151,334,126		$137,600,000

[1] Including estimated tobacco.